

THE CONTRACTOR IS DIRECTED TO VERIFY ALL QUANTITIES PRIOR TO PREPARING AND SUBMITTING HIS BID. ANY ITEMS OF WORK CALLED FOR ON THE PLANS FOR WHICH NO SPECIFIC METHOD OF PAYMENT IS INDICATED SHALL BE PERFORMED BY THE CONTRACTOR AND THE COST OF SUCH WORK BE INCLUDED IN THE UNIT PRICE BID FOR VARIOUS ITEMS.

**ESTIMATE OF QUANTITIES**

ITEM	QUANTITY	UNIT	DESCRIPTION
201	1	LUMP	CLEARING AND GRUBBING
202	9	LF	18" PIPE REMOVED
202	1	EA	CATCH BASIN REMOVED
203	1,140	CY	EXCAVATION (UNDERGROUND DETENTION SCP)
207	688	LF	SILT FENCE
207	1	EA	CONCRETE WASHOUT AREA
207	7	EA	DANDY BAG INLET PROTECTION
604	1	EA	MANHOLE (AA-S104)
604	4	EA	CATCH BASIN (COC AA-S133B (3'X3'))
604	1	EA	CATCH BASIN (MODIFIED COC AA-S133B (4'X4'))
901	185	LF	12" PIPE WITH TYPE 1 BEDDING
SPEC	1,109	LF	UNDERGROUND DETENTION - STORMTECH SC-740 - 9 ROWS (154 CHAMBERS, TOTAL LENGTH = 1,109 LF, 48 ISOLATOR ROW CHAMBERS, 8 - 10" INSPECTION PORTS)
SPEC	1	EA	30" NYLOPLAST DRAIN BASIN
SPEC	2	EA	24" MIN YARD DRAIN
<b>WORK IN RIGHT-OF-WAY</b>			
207	54	LF	SILT FENCE
207	1	EA	DANDY BAG INLET PROTECTION

**NOTES FOR MASS GRADING PLANS NOT GOING TO FEMA:**

UPON COMPLETION OF THE FILL IN CONJUNCTION WITH THIS MASS GRADING PLAN, AN APPLICATION FOR A LETTER OF MAP REVISION (LOMR) WILL NOT BE SUBMITTED TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA). THUS ANY FUTURE SUBMITTAL TO FEMA WILL FIRST REQUIRE A NEW GRADE AND FILL PLAN WITH PROOF AS THE FILL USED AND PROPER PLACEMENT, INCLUDING COMPACTION, PRIOR TO THE EFFECTIVE DATE OF THE LOMR. A BUILDING CONSTRUCTED WITHIN THE DESIGNATED FILL AREA WILL BE ELEVATED AND/OR DRY FLOOD PROOFED IN ACCORDANCE WITH THE REQUIREMENTS OF C.C. CHAPTER 1150, FLOODPLAIN MANAGEMENT OF THE COLUMBUS WATER, SEWER AND ELECTRICITY CODE.

FILLING MAY BE ALLOWED IN THE FLOODWAY FRINGE ONLY IF ASSOCIATED WITH A GRADE AND FILL PLAN. THE GRADE AND FILL PLAN SHALL BE FULLY DETAILED AND SUBMITTED AS PART OF AN APPLICATION FOR A CERTIFICATE OF ZONING CLEARANCE. FILL SHALL NOT BE PLACED UNTIL AFTER THE CERTIFICATE OF ZONING CLEARANCE HAS BEEN ISSUED FOR GRADING AND FILLING.

REGARDLESS OF ANY DETERMINATION ISSUED BY FEMA TO REMOVE AN AREA FILLED AS PERMITTED AND APPROVED FROM THE DESIGNATED SPECIAL FLOOD HAZARD AREA (SFHA), DEVELOPMENT WITHIN THAT AREA OF FILL SHALL BE CONSTRUCTED WITH THE LOWEST FLOOR LEVEL, EXCLUDING A BASEMENT OR CRAWL SPACE, AT OR ABOVE THE FLOOD PROTECTION ELEVATION.

THE LOWEST GRADE ADJACENT TO A BUILDING OR STRUCTURE TO BE CONSTRUCTED WITHIN THE DESIGNATED FILL AREA SHALL BE AT OR ABOVE THE FLOOD PROTECTION ELEVATION, WITH THAT GRADE ELEVATION TO EXTEND AT LEAST TWENTY (20) FEET FROM THE PROPOSED BUILDING TOWARDS THE FLOODWAY OR FLOODING SOURCE.

IN ADDITION, A RESIDENTIAL DWELLING WITHIN THE DESIGNATED FILL AREA MUST HAVE A MEANS OF INGRESS AND EGRESS AT OR ABOVE THE BASE FLOOD ELEVATION THAT EXTENDS CONTINUOUSLY FROM THE DWELLING TO A LOCATION OUTSIDE THE SPECIAL FLOOD HAZARD AREA WITHIN THE SUBJECT SITE.

REASONABLY SAFE FROM FLOODING  
ALL STRUCTURES ASSOCIATED WITH FUTURE DEVELOPMENT WITHIN THE AREA OF THE FLOODPLAIN FILL SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD OF BEING "REASONABLY SAFE FROM FLOODING", AS OUTLINED IN TECHNICAL BULLETIN 10-01, DATED MAY 2001, PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) OR SUCCESSOR DOCUMENTS.

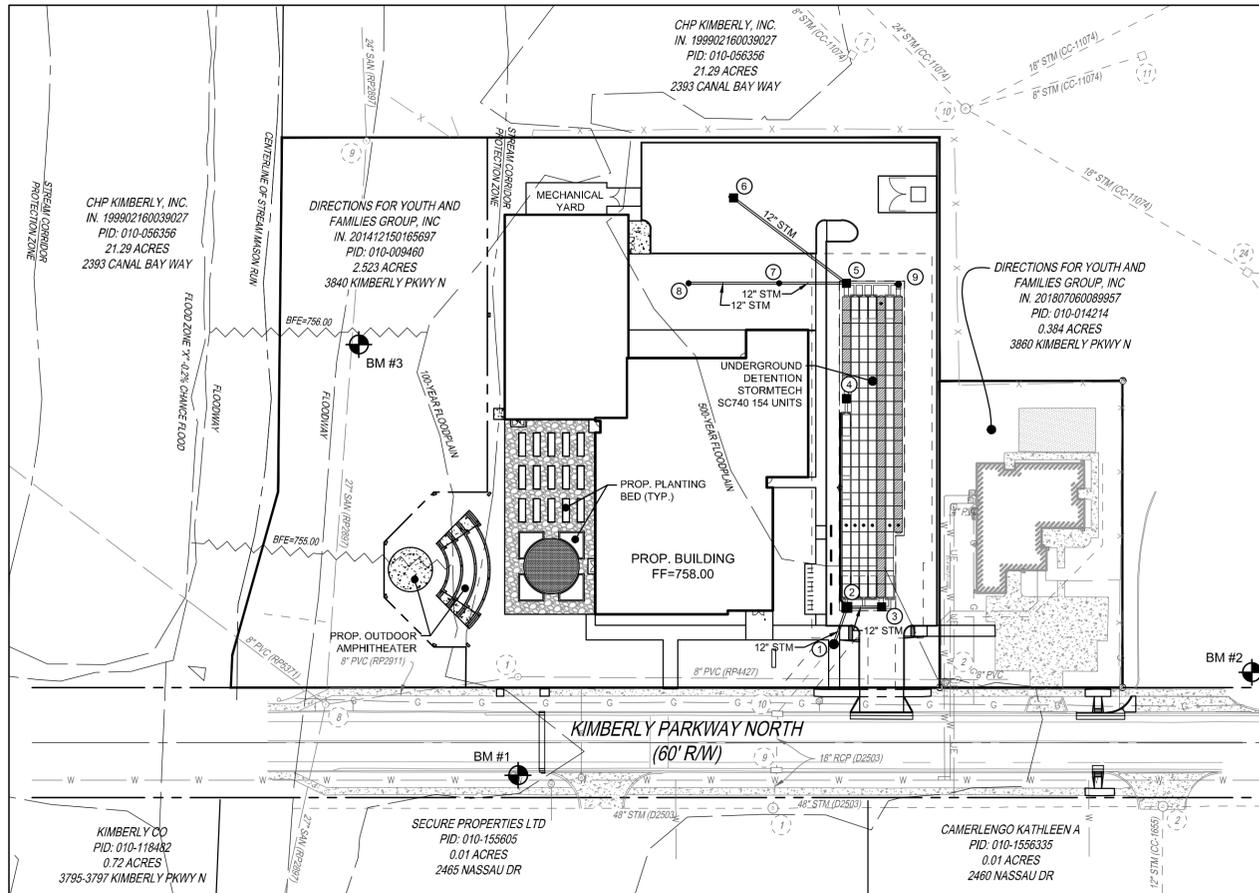
**BENCHMARKS**

VERTICAL DATUM IS NAVD1988 BASED ON SOURCE BENCHMARK CORRS STATION "COLB". THIS IS A CONTINUOUSLY OPERATING REFERENCE STATION LOCATED ON THE GROUNDS OF AN ODOT FACILITY LOCATED AT 1960 W BROAD STREET IN COLUMBUS OHIO. THE PUBLISHED ELEVATION IS 722.39' (NAVD88).

BENCHMARK	DESCRIPTION	NORTHING	EASTING	ELEVATION
SOURCE BM	CORS STATION "COLB"	714254.27	1815510.69	722.39
BM #1	X-CUT ON FIRE HYDRANT FLANGE	700474.68	1857943.49	755.59
BM #2	BOX CUT ON SIGN FOUNDATION	700734.64	1858254.45	758.66
BM #3	RAILROAD SPIKE IN THREE ROOT	700628.06	1857745.37	752.60

#HORIZ. REF. DATUM = NAD 83 (NSRS 2011 ADJ.)

BEARINGS ARE BASED ON THE STATE PLANE COORDINATE SYSTEM, OHIO SOUTH ZONE (NAD83-2011) AS DETERMINED BY A GPS SURVEY UTILIZING CORRS STATION "COLB". THE PROJECT COORDINATES ARE BASED ON STATE PLANE COORDINATES AND HAVE BEEN SCALED TO GROUND BY USING A PROJECT ADJUSTMENT FACTOR OF 1.0000507821 APPLIED AT BASE POINT N 700,500.00 E 1,858,000.00. GRID AND GROUND COORDINATES ARE IDENTICAL AT THE BASE POINT.



**SHEET INDEX**

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**SCP WATER QUANTITY/QUALITY STRUCTURE NOTICE**

THE WATER QUANTITY/QUALITY STRUCTURE 2 AND THE ISOLATOR ROWS OF THE UNDERGROUND DETENTION SYSTEM ARE AN INTEGRAL PART OF THE PRIVATE STORM SEWER SYSTEM DEPICTED IN THESE DRAWINGS. RESPONSIBILITY AND ASSURANCE OF PERIODIC MAINTENANCE AND THE CONTINUOUS FUNCTIONALITY OF THIS STORMWATER QUANTITY/QUALITY DEVICES IS PERPETUAL, BEGINNING WITH THE OWNER AT THE TIME OF INSTALLATION AND CONTINUING TO ALL FUTURE OWNERS OF SAID PRIVATE STORM SEWER SYSTEM.

SEE SHEET 9 FOR POST-CONSTRUCTION MAINTENANCE AND INSPECTION SCHEDULE.

SITE IS TRIBUTARY TO: MASON RUN TO BIG WALNUT CREEK TO SCIOTO RIVER

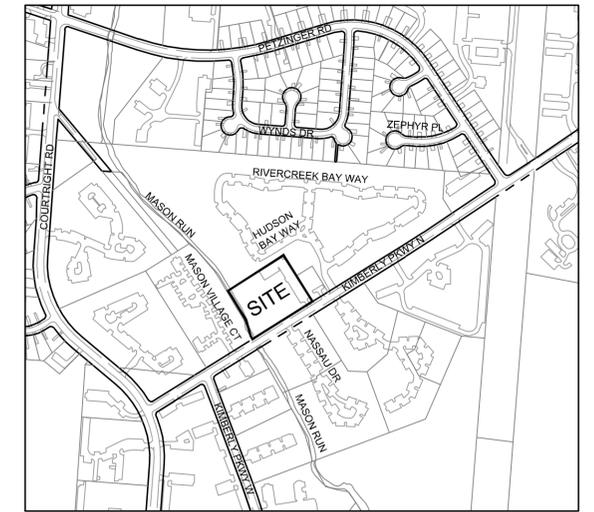
**100-YEAR DETENTION SUMMARY**

LOCATION	VOLUME REQUIRED	VOLUME PROVIDED	100-YR ELEV & VOLUME REQUIRED ELEV (NAVD88)	VOLUME PROVIDED ELEV (NAVD88)
CB 2 MODIFIED AA-S133B (4'X4') - UNDERGROUND DETENTION WITH ISOLATOR ROWS	11,316 CF	11,490 CF	754.12	754.20 (SEE NOTE BELOW)

NOTE: VOLUME PROVIDED INCLUDES REQUIRED STONE SECTION AROUND UNDERGROUND STORAGE CHAMBERS AT 30% MINIMUM VOID SPACE AND IS THE ELEVATION AT THE TOP OF STONE STORAGE. REFER TO SHEET 8 FOR ELEVATION TABLES.

**SUMMARY OF POST-CONSTRUCTION STORMWATER FACILITY CONTROL**

CONTROL/OUTLET STRUCTURE NO.	PLAN VIEW & DETAIL PAGE NUMBERS FOR SCP	CONTROL FUNCTION	DRAINAGE AREA TO CONTROL FACILITY (ACRES)	FACILITY TYPE	GREEN INFRASTRUCTURE (SQ FT)
CB 2 - MODIFIED AA-S133B (4'X4')	4, 5	WATER QUANTITY & QUALITY	1.28	UNDERGROUND DETENTION WITH ISOLATOR ROWS	N/A



**LOCATION MAP**  
SCALE: 1"= 50'

**LEGEND:**  
CITY OF COLUMBUS CORPORATION LIMITS

**PROJECT DESCRIPTION**

NEW 23,000 SF FACILITY, INCLUDING PARKING LOT AND UTILITY SERVICES, FOR THE DIRECTIONS FOR YOUTH & FAMILY SERVICE GROUP ON APPROXIMATELY 3 ACRES ALONG KIMBERLY PARKWAY NORTH.

**OWNER**

DIRECTIONS FOR YOUTH AND FAMILIES GROUP INC  
1515 INDIANOLA AVE  
COLUMBUS, OH 43201  
CONTACT: JENNIFER VANSCHOYCK  
PHONE: (614) 286-5186  
EMAIL: JVanSchoyck@dfyf.org

**ENGINEER**

THE KLEINGERS GROUP  
350 WORTHINGTON RD, SUITE B  
WESTERVILLE, OH 43082  
PHONE: (614) 882-4311  
FAX: (614) 882-4479  
CONTACT: MIKE COUVREUR  
EMAIL: mike.couvreur@kleingers.com

**DEVELOPER**

DESIGN GROUP  
515 E. MAIN STREET  
COLUMBUS, OH 43215  
PHONE: (614) 255-2253  
CONTACT: NIKKI WILDMAN  
EMAIL: nwildman@designgroup.us.com

**STANDARD DRAWINGS**

THE STANDARD DRAWINGS LISTED ON THIS PLAN SHALL BE CONSIDERED A PART THEREOF.

CITY OF COLUMBUS:		
AA-S104	AA-S141	AA-S179
AA-S106	AA-S148	1441 (07/01/21)
AA-S107	AA-S150	2230 (04/30/18)
AA-S112	AA-S151	
AA-S119	AA-S161	
AA-S133B	AA-S176	

**REFERENCE DOCUMENTS**

THE DEVELOPER SHALL MAKE AVAILABLE TO THE CONTRACTOR ALL NECESSARY REFERENCE INFORMATION PERTINENT TO THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS. THESE DOCUMENTS INCLUDE, BUT ARE NOT LIMITED TO:

- SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING REPORT PREPARED BY GEOTECHNICAL CONSULTANTS, INC. DATED JUNE 3, 2021.

**SANITARY NOTE**

CONNECTION TO SEWER CANNOT BE MADE WITHOUT OBTAINING A PERMIT FROM SEWER PERMIT OFFICE AT 111 N FRONT STREET, 1ST FLOOR (614-645-7490).

SANITARY SERVICE SHOWN IN THIS PLAN ARE SHOWN FOR REFERENCE ONLY.

**FEMA NOTE:**

1. THIS SITE IS LOCATED IN ZONE X AND ZONE AE - FIRM MAP 39049C0342L, EFFECTIVE 06/16/2011

THE AMOUNT OF FILL WITHIN DESIGNATED FEMA FLOODPLAIN AREAS ONSITE IS 77 C.Y.  
THE AMOUNT OF COMPENSATORY STORAGE WITHIN DESIGNATED FEMA FLOODPLAIN AREAS ONSITE IS 147 C.Y.  
SEE SHEET 6 FOR FILL AND FILL COMPENSATED AREAS.

**SITE DATA TABLE**

TOTAL SITE AREA:	2.523 ACRES
SITE DISTURBED AREA:	1.91 ACRES
R/W ONLY DISTURBED AREA:	0.02 ACRES
*TOTAL DISTURBED AREA:	1.93 ACRES
PRE-DEV. IMPERVIOUS AREA:	0.83 ACRES
POST-DEV. IMPERVIOUS AREA:	1.26 ACRES

\*ALL OF THE TOTAL DISTURBED AREA IS TREATED/ADDRESSED WITH THIS CC PLAN, INCLUDING DISTURBED AREA IN R/W



**C200** DATE: 01-14-2022 142 & 193

**EASEMENT REFERENCE**

CITY NO.	COUNTY RECORD		GRANTOR
	VOL.	PAGE	

**REVISIONS**

NO.	DESCRIPTION	DATE

PLAN PREPARED BY:

MICHAEL J. COUVREUR E-70851 DATE  
EMAIL: MIKE.COUVREUR@KLEINGERS.COM

APPROVALS: SIGNATURES BELOW SIGNIFY ONLY CONCURRENCE WITH THE GENERAL PURPOSE AND GENERAL LOCATION OF THE PROJECT. ALL TECHNICAL DETAILS REMAIN THE RESPONSIBILITY OF THE ENGINEER PREPARING THE PLANS. APPROVED FOR STORM SEWERS ONLY.

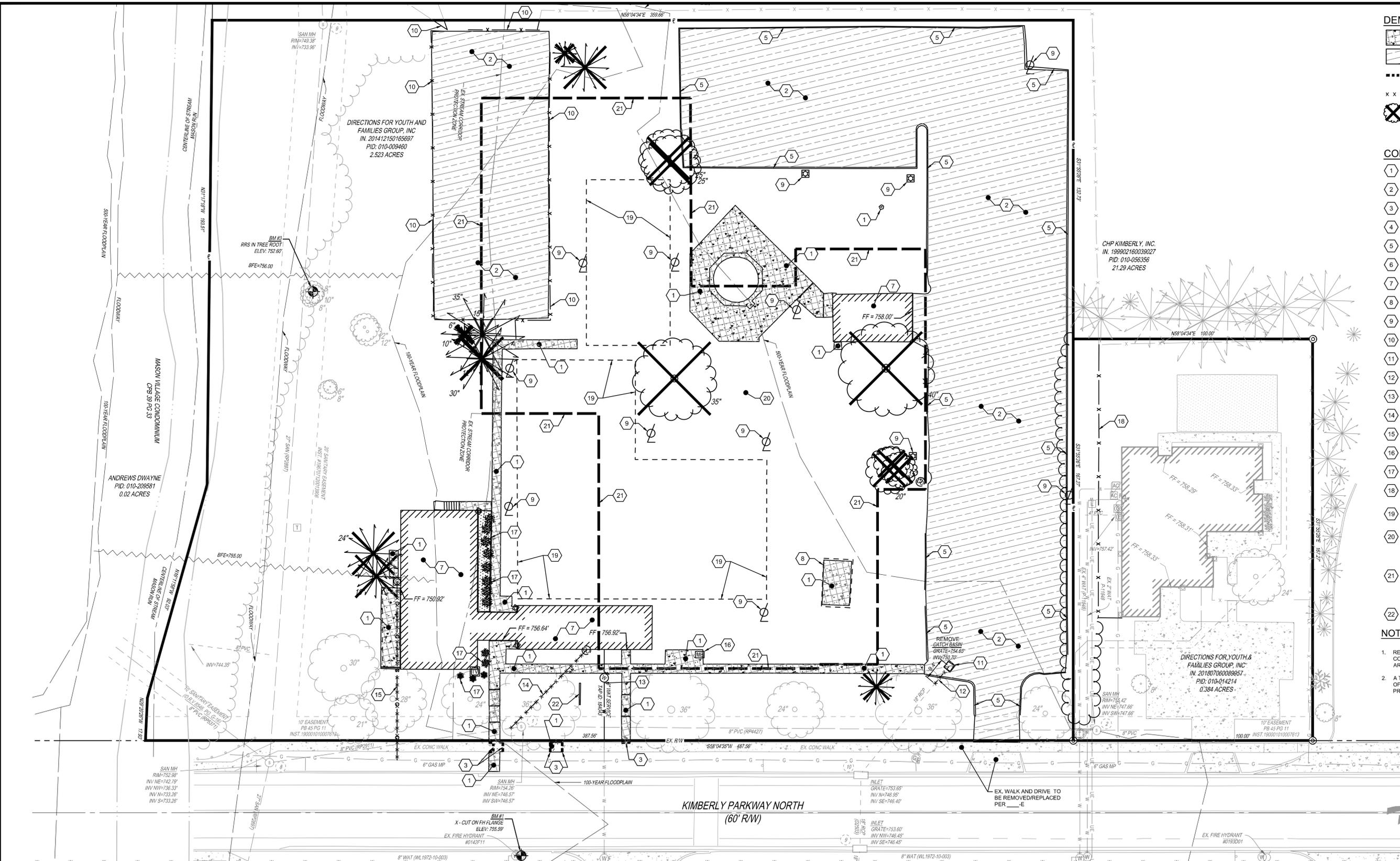
CITY ENGINEER/ADMINISTRATOR, DIVISION OF DESIGN AND CONSTRUCTION	DATE
ADMINISTRATOR, DIVISION OF POWER	DATE
ADMINISTRATOR, DIVISION OF SEWERAGE AND DRAINAGE	DATE
ADMINISTRATOR, DIVISION OF WATER	DATE

PROJECT TITLE: PRIVATE STORM SEWER AND STORMWATER FACILITIES FOR DIRECTIONS FOR YOUTH AND FAMILY SERVICES 3840 KIMBERLY PARKWAY NORTH TITLE SHEET

DIVISION USE ONLY				OWNER
				CONTRACTOR
				INSPECTOR
				AGREEMENT
				COMPLETED
				RPD
				CHK
				CID
				CON.DR.
				INDEX
				RECORD
				DETAIL
				FILE

SCALE: AS SHOWN	SHEET: 1/11
CONTRACT DRAWING NO. CC-19463	RECORD PLAN NO.





- DEMOLITION LEGEND**
- REMOVE EX. CONCRETE
  - REMOVE EX. ASPHALT
  - SAWCUT LINE
  - REMOVE EX. UTILITY
  - REMOVE EX. TREE

- CODED NOTES**
- 1 REMOVE EX. CONCRETE
  - 2 REMOVE EX. ASPHALT
  - 3 SAWCUT EX. CONCRETE AT NEAREST JOINT
  - 4 SAWCUT EX. CURB AND PAVEMENT
  - 5 REMOVE EX. CURB
  - 6 REMOVE EX. CURB & GUTTER
  - 7 REMOVE EX. BUILDING
  - 8 RELOCATE EX. SHELTER TO ADJACENT DFYF PROPERTY
  - 9 REMOVE EX. LIGHT POLE
  - 10 REMOVE EX. FENCE
  - 11 REMOVE EX. STORM STRUCTURE
  - 12 REMOVE EX. STORM PIPE
  - 13 ABANDON WATER SERVICE PER WSP-6737
  - 14 REMOVE EX. SANITARY SERVICE
  - 15 REMOVE EX. GAS SERVICE
  - 16 REMOVE EX. MAILBOX
  - 17 REMOVE EX. LANDSCAPING
  - 18 REMOVE EX. FENCE AND LANDSCAPING
  - 19 APPROXIMATE LIMITS OF EX. POOL AND VOLLEYBALL COURT PREVIOUSLY ABANDONED AND BURIED.
  - 20 ANY REMNANTS OF EXISTING SIDEWALK TO BE REMOVED.
  - 21 10' OFFSET OF PROPOSED BUILDING FOOTPRINT. CONTRACTOR SHALL REMOVE EXISTING FILL AND REMNANTS OF POOL STRUCTURE AND SAND VOLLEYBALL COURT WITHIN LIMITS AND REPLACE WITH STRUCTURAL BACKFILL SATISFACTORY TO GEOTECHNICAL ENGINEER. SEE GEOTECHNICAL REPORT FOR DETAILS.
  - 22 REMOVE EX. SITE SIGN

- NOTES:**
1. REMOVAL OF EXISTING STRUCTURES WITHIN THE STREAM CORRIDOR PROTECTION ZONE ARE A PERMITTED ACTIVITY. AREA TO BE MITIGATED PER MITIGATION PLAN ON SHEET 7.
  2. A TYPE III VARIANCE HAS BEEN SUBMITTED FOR THE REMOVAL OF EXISTING TREES WITHIN THE STREAM CORRIDOR PROTECTION ZONE AND IS PENDING APPROVAL.

0 10 20 40

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**C202**    DATE: 01-14-2022

EASEMENT REFERENCE		
CITY NO.	COUNTY RECORD	
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REVISIONS		
NO.	DESCRIPTION	DATE

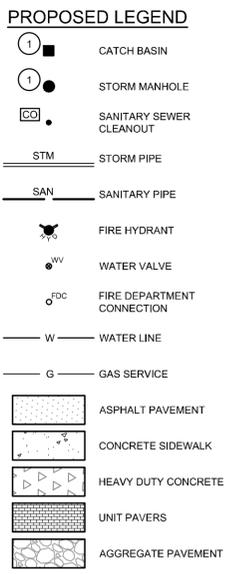
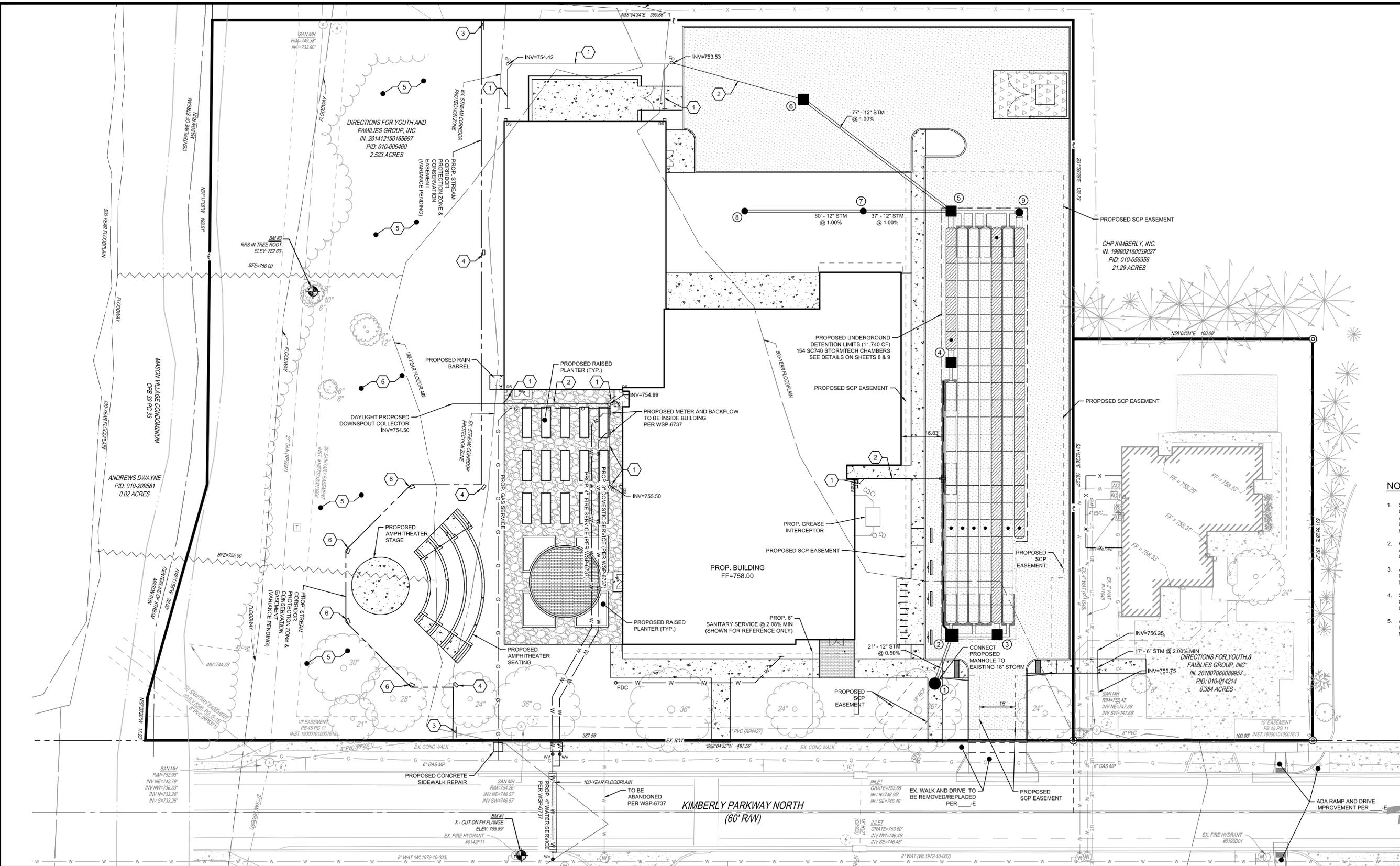
PLAN PREPARED BY:

**THE KLEINGERS GROUP**

CIVIL ENGINEERING    www.kleingers.com  
SURVEYING    350 Worthington Rd., Ste B  
LANDSCAPE ARCHITECTURE    Westerville, OH 43082  
614.882.4311

PROJECT TITLE:			
PRIVATE STORM SEWER AND STORMWATER FACILITIES FOR DIRECTIONS FOR YOUTH AND FAMILY SERVICES 3840 KIMBERLY PARKWAY NORTH DEMOLITION PLAN			
DIVISION USE ONLY		OWNER	
		CONTRACTOR	
		INSPECTOR	
		AGREEMENT	COMPLETED
		RPD	CHK
		CID	CON.DR.
		INDEX	RECORD
		DETAIL	FILE

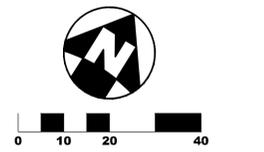
CITY OF COLUMBUS	
DEPARTMENT OF PUBLIC UTILITIES	
DIVISION OF SEWERAGE AND DRAINAGE	
DIVISION USE ONLY	
SCALE: 1"= 20'	SHEET: 3/11
CONTRACT DRAWING NO. CC-19463	RECORD PLAN NO.



- CODED NOTES**
- 1 6" STM @ 1.04% MIN.
  - 2 8" STM @ 0.75% MIN.
  - 3 PERMANENT STREAM CORRIDOR PROTECTION ZONE SIGN PER COC STD DWG AA-S179
  - 4 PERMANENT STREAM CORRIDOR PROTECTION ZONE NO MOW MARKER WITH FLEXIBLE POST PER COC STD DWG AA-S176
  - 5 NO CONSTRUCTION ACTIVITIES OTHER THAN ALLOWABLE DISTURBANCES ARE PERMITTED WITHIN LIMITS OF THE STREAM CORRIDOR PROTECTION ZONE. SEE MITIGATION PLAN SHEET 7.
  - 6 NATURAL STONE MARKER

- NOTES:**
1. SANITARY SERVICE IS SHOWN ON THIS PLAN FOR REFERENCE ONLY. APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF THE SANITARY SERVICE OR ITS LOCATION. CONTACT THE DRU PERMIT OFFICE AT 111 N. FRONT STREET FOR SANITARY SERVICE APPROVAL.
  2. PRIOR TO ANY CONSTRUCTION CONTRACTOR SHALL LOCATE AN EXPOSE EXISTING UTILITIES AND NOTIFY ENGINEER IF ANY CONFLICTS OCCUR.
  3. ANY EXISTING STORM INLETS IMPACTED BY THE NEW CONSTRUCTION ACTIVITIES WILL NEED THE APPROPRIATE INLET PROTECTION FOR SEDIMENT CONTROL.
  4. STREAM CORRIDOR PROTECTION ZONE TO BE PLACED IN CONSERVATION EASEMENT AFTER COMPLETION OF CONSTRUCTION AND MITIGATION.
  5. A TYPE III STORMWATER VARIANCE HAS BEEN SUBMITTED AND IS PENDING APPROVAL FOR PROPOSED STREAM CORRIDOR PROTECTION ZONE WORK AND MITIGATION.

**SANITARY NOTE**  
 CONNECTION TO SANITARY CANNOT BE MADE UNTIL PERMIT IS OBTAINED FROM SEWER PERMIT OFFICE AT 111 N. FRONT ST. (614-645-7490).



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**C203** DATE: 01-14-2022

EASEMENT REFERENCE		
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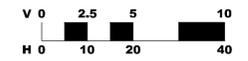
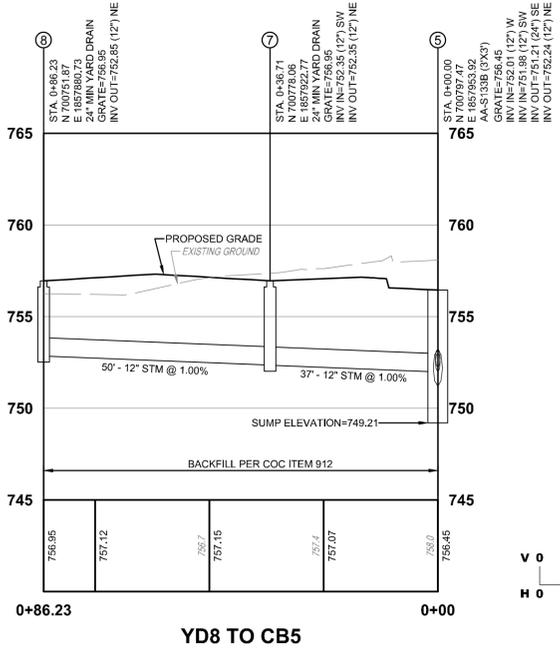
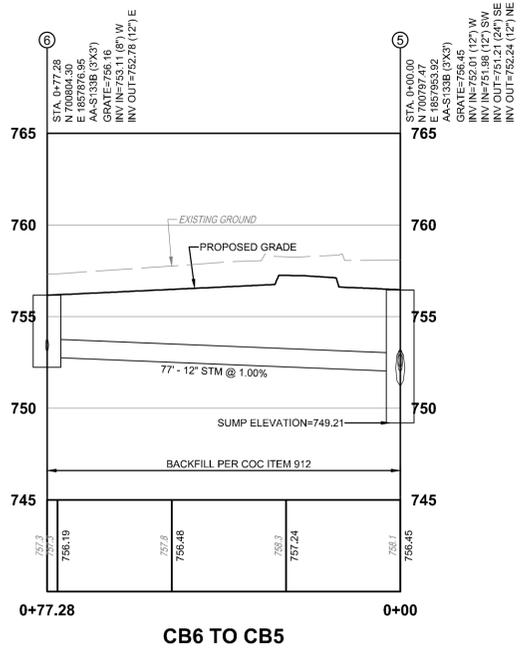
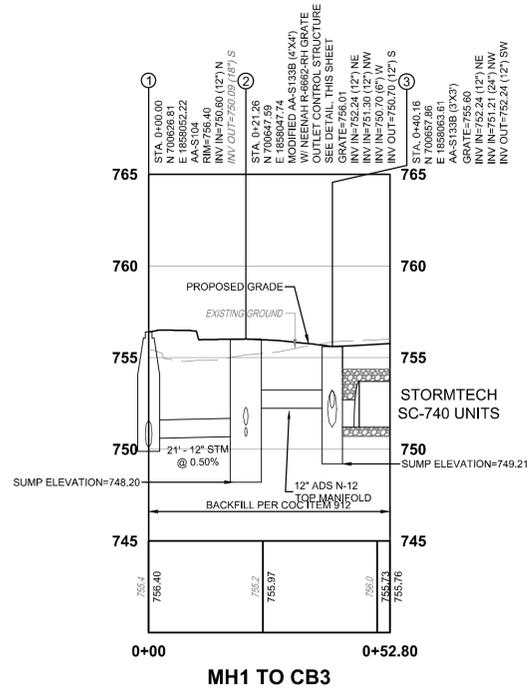
REVISIONS		
NO.	DESCRIPTION	DATE

PLAN PREPARED BY:

**THE KLEINGERS GROUP**  
 CIVIL ENGINEERING SURVEYING LANDSCAPE ARCHITECTURE  
 www.kleingers.com  
 350 Worthington Rd., Ste B  
 Westerville, OH 43082  
 614.882.4311

PROJECT TITLE:			
PRIVATE STORM SEWER AND STORMWATER FACILITIES FOR DIRECTIONS FOR YOUTH AND FAMILY SERVICES 3840 KIMBERLY PARKWAY NORTH UTILITY PLAN			
DIVISION USE ONLY		OWNER	
		CONTRACTOR	
		INSPECTOR	
		AGREEMENT	COMPLETED
		RPD	CHK
		INDEX	RECORD
		DETAIL	FILE

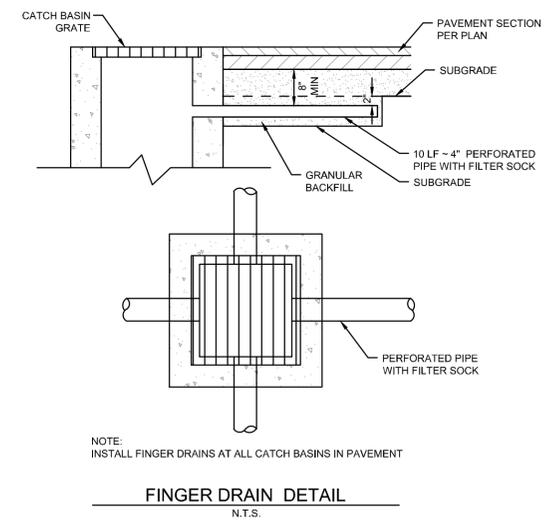
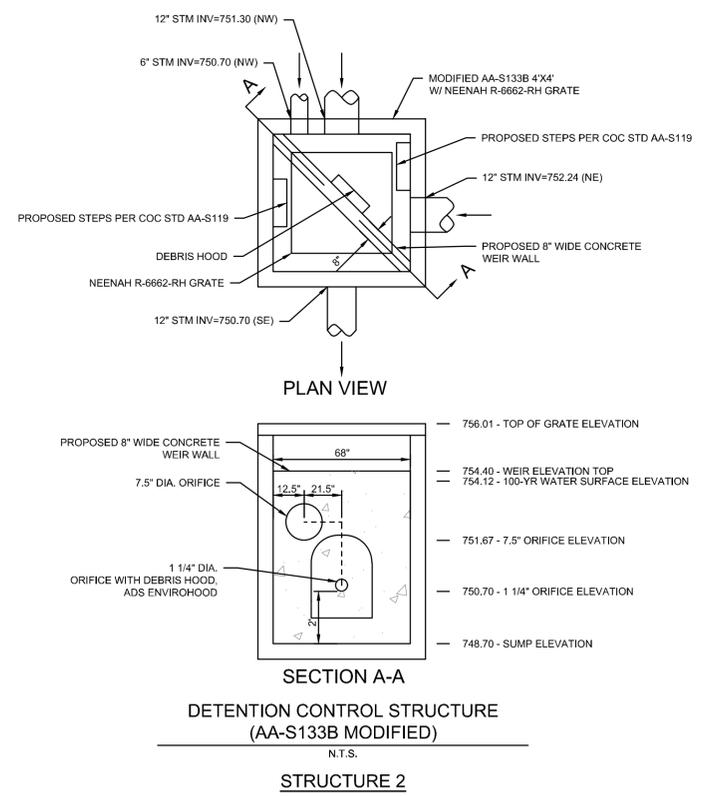
CITY OF COLUMBUS	
DEPARTMENT OF PUBLIC UTILITIES	
DIVISION OF SEWERAGE AND DRAINAGE	
DIVISION USE ONLY	
SCALE: 1"= 20'	SHEET: 4/11
CONTRACT DRAWING NO. CC-19463	RECORD PLAN NO.



OHIO SOUTH COORDINATES				
STR. NO.	PLAN		AS-BUILT	
	NORTHING	EASTING	NORTHING	EASTING
1	700626.81	1858052.22		
2	700647.59	1858047.74		
3	700657.86	1858063.61		
4	700744.00	1857987.24		
5	700797.47	1857953.92		
6	700804.30	1857876.95		
7	700778.06	1857922.77		
8	700751.87	1857880.73		
9	700812.09	1857978.39		

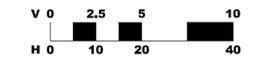
**STORM STRUCTURE SCHEDULE**

- ④  
N 700744.00  
E 1857987.24  
AA-S133B (3'X3')  
GRATE=756.37  
INV OUT=751.21 (24") NW  
INV OUT=752.24 (12") SE
- ⑤  
N 700812.09  
E 1857978.39  
30" NYLOPLAST BASIN  
W/ SOLID GRATE  
GRATE=757.75  
INV OUT=751.21 (24") SE  
INV OUT=752.24 (12") SW



- NOTES**
- ALL BACKFILL SHALL BE PER CITY OF COLUMBUS ITEM 911 UNLESS OTHERWISE SPECIFIED.
  - PROJECT COORDINATES ARE BASED ON STATE PLANE COORDINATES AND HAVE BEEN SCALED TO GROUND BY USING A PROJECT ADJUSTMENT FACTOR OF 1.0000507821 APPLIED AT BASE POINT N 700,500.00 E 1,858,000.00. GRID AND GROUND COORDINATES ARE IDENTICAL AT THE BASE POINT.

PROFILE VERTICAL DATUM = NAVD 88



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**C204** DATE: 01-14-2022

EASEMENT REFERENCE		
CITY NO.	COUNTY RECORD	
	VOL.	PAGE

REVISIONS		
NO.	DESCRIPTION	DATE

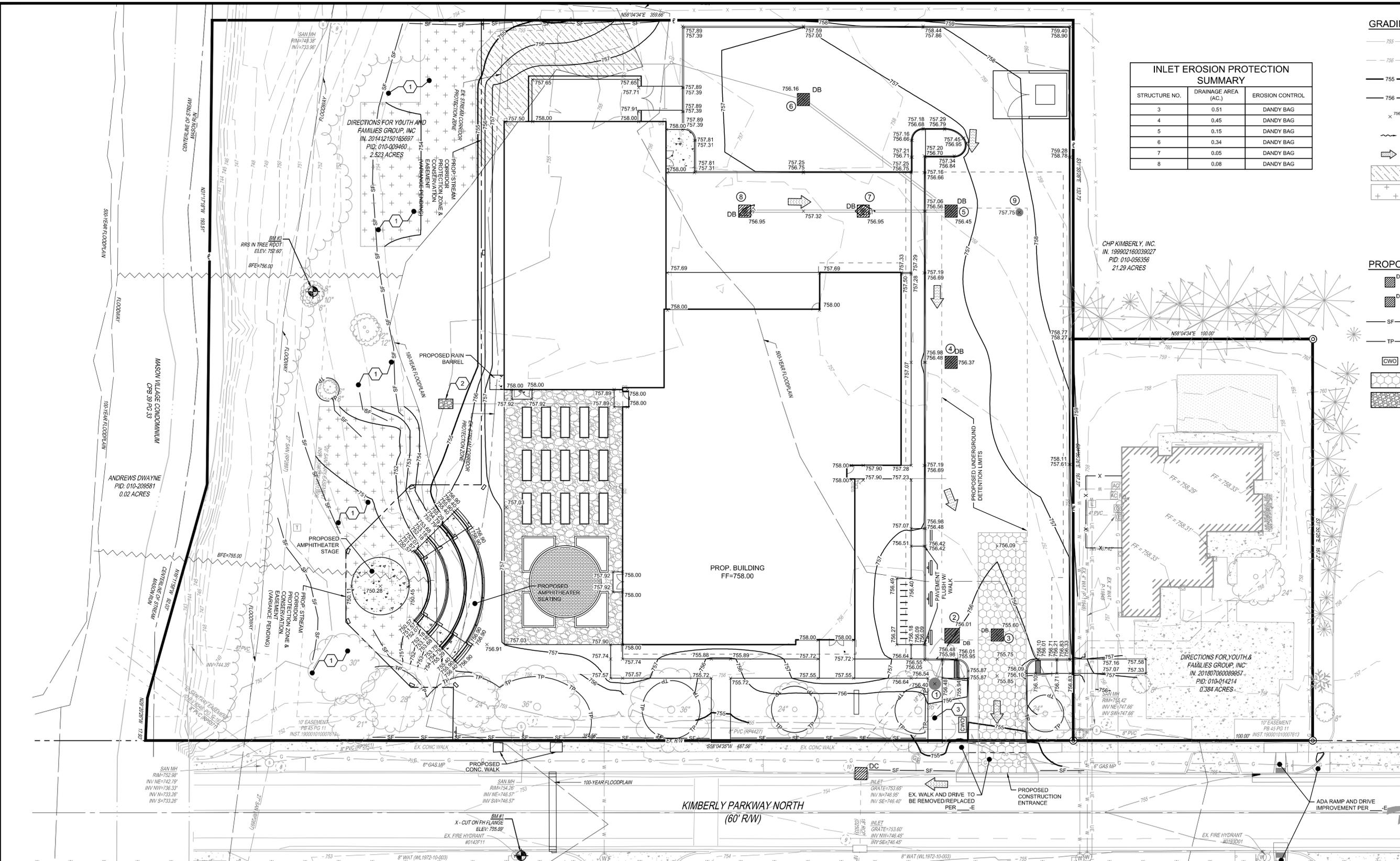
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PROJECT TITLE:			
PRIVATE STORM SEWER AND STORMWATER FACILITIES FOR DIRECTIONS FOR YOUTH AND FAMILY SERVICES 3840 KIMBERLY PARKWAY NORTH STORM SEWER PROFILES			
DIVISION USE ONLY		OWNER	
		CONTRACTOR	
		INSPECTOR	
		AGREEMENT	
		RPD	CHK
		CID	CON.DR.
		INDEX	RECORD
		DETAIL	FILE

CITY OF COLUMBUS DEPARTMENT OF PUBLIC UTILITIES DIVISION OF SEWERAGE AND DRAINAGE	
DIVISION USE ONLY	
SCALE: AS SHOWN	SHEET: 5/11
CONTRACT DRAWING NO. CC-19463	RECORD PLAN NO.

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STRUCTURE NO.	DRAINAGE AREA (AC.)	EROSION CONTROL
3	0.51	DANDY BAG
4	0.45	DANDY BAG
5	0.15	DANDY BAG
6	0.34	DANDY BAG
7	0.05	DANDY BAG
8	0.08	DANDY BAG

**GRADING LEGEND**

- 755 — EXISTING MAJOR CONTOUR
- 756 — EXISTING MINOR CONTOUR
- 755 — PROPOSED MAJOR CONTOUR
- 756 — PROPOSED MINOR CONTOUR
- x 756.00 PROPOSED SPOT ELEVATION
- ~ PROPOSED SWALE
- 100-YEAR FLOOD ROUTE
- ▨ GRADING FILL AREA
- + + GRADING COMPENSATORY STORAGE AREA

**PROPOSED EROSION CONTROL LEGEND**

- DB DANDY BAG INLET PROTECTION SEE DETAIL, SHEET 11
- DC DANDY CURB INLET PROTECTION SEE DETAIL, SHEET 11
- SF SILT FENCE SEE DETAIL, SHEET 11
- TP TREE PROTECTION SEE DETAIL, SHEET 11
- CWO CONCRETE WASHOUT SEE DETAIL, SHEET 11
- Construction Entrance SEE DETAIL, SHEET 11
- TYPE C ROCK CHANNEL PROTECTION

**NOTES:**

- ANY EXISTING STORM INLETS IMPACTED BY THE NEW CONSTRUCTION ACTIVITY WILL NEED THE APPROPRIATE INLET PROTECTION FOR SEDIMENT CONTROL.
- PROPOSED DANDY BAGS SHALL ACT AS SEDIMENT CONTROL FOR THE PROPOSED PROJECT. THE DRAINAGE AREA GOING TO EACH DANDY BAG IS LESS THAN 1.0 ACRE. CONTRACTOR SHALL NOT SEND ANY SEDIMENT-LADEN, MUDDY OR TURBID WATER TO THE PROPOSED UNDERGROUND DETENTION SYSTEM.

**CODED NOTE**

- NO CONSTRUCTION ACTIVITIES OTHER THAN ALLOWABLE DISTURBANCES ARE PERMITTED WITHIN LIMITS OF THE STREAM CORRIDOR PROTECTION ZONE. SEE MITIGATION PLAN SHEET 7.
- 4'x6'x1' 5" TYPE C ROCK CHANNEL PROTECTION W/ FILTER
- HAND EXCAVATE PROPOSED SIDEWALK UNDER DRIP LINE OF EXISTING TREE TO PRESERVE AND PROTECT TREE ROOTS

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**C205** DATE: 01-14-2022

EASEMENT REFERENCE		
CITY NO.	COUNTY RECORD	GRANTOR
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PLAN PREPARED BY:

**THE KLEINGERS GROUP**

CIVIL ENGINEERING SURVEYING LANDSCAPE ARCHITECTURE

www.kleingers.com

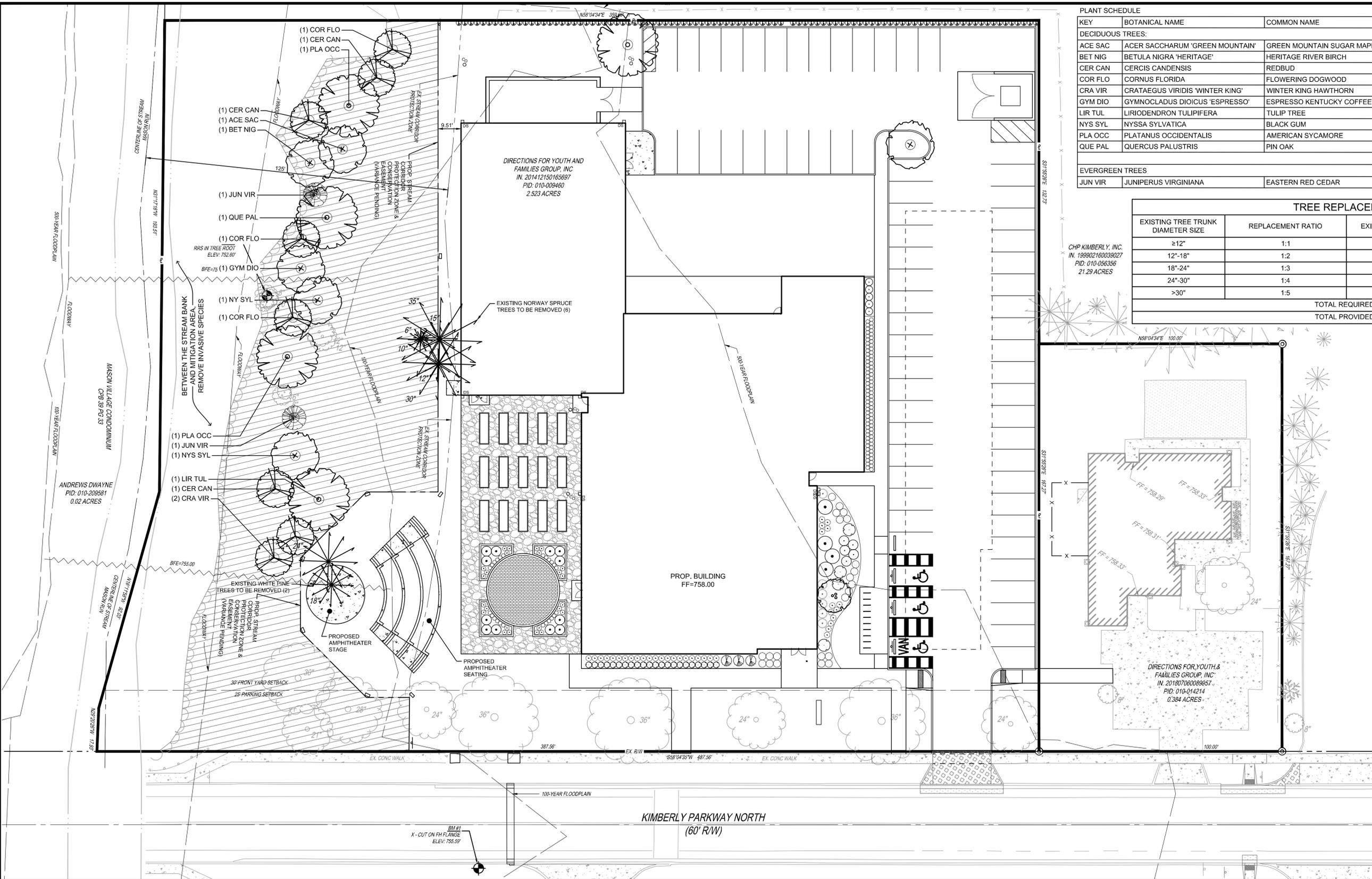
350 Worthington Rd., Ste B  
Westerville, OH 43082  
614.882.4311

PROJECT TITLE: PRIVATE STORM SEWER AND STORMWATER FACILITIES FOR DIRECTIONS FOR YOUTH AND FAMILY SERVICES 3840 KIMBERLY PARKWAY NORTH GRADING AND EROSION CONTROL PLAN

DIVISION USE ONLY

OWNER	
CONTRACTOR	
INSPECTOR	
AGREEMENT	COMPLETED
RPD	CHK
INDEX	CID
DETAIL	CON.DR.
	RECORD
	FILE

CITY OF COLUMBUS DEPARTMENT OF PUBLIC UTILITIES DIVISION OF SEWERAGE AND DRAINAGE	
DIVISION USE ONLY	
SCALE: 1"= 20'	SHEET: 6/11
CONTRACT DRAWING NO. CC-19463	RECORD PLAN NO.



**PLANT SCHEDULE**

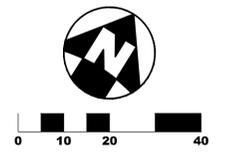
KEY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
<b>DECIDUOUS TREES:</b>					
ACE SAC	ACER SACCHARUM 'GREEN MOUNTAIN'	GREEN MOUNTAIN SUGAR MAPLE	2.5" CAL. MIN.	B&B	
BET NIG	BETULA NIGRA 'HERITAGE'	HERITAGE RIVER BIRCH	14' HT. MIN.	B&B	3-STEM TRUNK
CER CAN	CERCIS CANDENSIS	REDBUD	8' HT. MIN.	B&B	3-STEM TRUNK
COR FLO	CORNUS FLORIDA	FLOWERING DOGWOOD	2.5" CAL. MIN.	B&B	SINGLE STEM
CRA VIR	CRATAEGUS VIRIDIS 'WINTER KING'	WINTER KING HAWTHORN	2.5" CAL. MIN.	B&B	SINGLE STEM
GYM DIO	GYMNOCLADUS DIOICUS 'ESPRESSO'	ESPRESSO KENTUCKY COFFEETREE	2.5" CAL. MIN.	B&B	
LIR TUL	LIRIODENDRON TULIPIFERA	TULIP TREE	2.5" CAL. MIN.	B&B	
NYS SYL	NYSSA SYLVATICA	BLACK GUM	2.5" CAL. MIN.	B&B	
PLA OCC	PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	2.5" CAL. MIN.	B&B	
QUE PAL	QUERCUS PALUSTRIS	PIN OAK	2.5" CAL. MIN.	B&B	
<b>EVERGREEN TREES</b>					
JUN VIR	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	8' HT. MIN.	B&B	

**TREE REPLACEMENT PLAN**

EXISTING TREE TRUNK DIAMETER SIZE	REPLACEMENT RATIO	EXISTING TREES REMOVED	REQUIRED 2.5" REPLACEMENT TREES
≥12"	1:1	3	3
12"-18"	1:2	2	4
18"-24"	1:3	1	3
24"-30"	1:4	1	4
>30"	1:5	1	5
<b>TOTAL REQUIRED 2.5" REPLACEMENT TREES</b>			<b>19</b>
<b>TOTAL PROVIDED 2.5" REPLACEMENT TREES</b>			<b>19</b>

- LEGEND**
- EX. SCZP LIMITS
  - PROPOSED SCZP LIMITS
  - PROPOSED MITIGATION AREA TO BE PLANTED WITH NATURAL GRASSES
  - EXISTING TREE TO BE REMOVED
  - PROPOSED TREE
- PROPOSED ENCROACHMENT AREA: 4,774 SF  
PROPOSED MITIGATION AREA: 19,137 SF  
REQUIRED MITIGATION CREDITS: 4,774 SF  
PROPOSED MITIGATION CREDITS: 19,137/4 = 4,784 SF

- MITIGATION AREA SEED MIX:**  
GRASS SEED: FRESH, CLEAN, DRY, NEW-CROP SEED COMPLYING WITH AOSA'S "RULES FOR TESTING SEEDS" FOR PURITY AND GERMINATION TOLERANCES.  
SEED MIX: SEED OF GRASS SPECIES AS FOLLOWS, WITH NOT LESS THAN 95 PERCENT GERMINATION, NOT LESS THAN 100 PERCENT PURE SEED, AND COMPLETELY FREE OF NOXIOUS WEEDS AND GRASSES.
- "NATIVE SHORT GRASS SEED MIX" (ITEM #MSG03) MANUFACTURED BY OHIO PRAIRIE NURSERY, APPROVED EQUAL (SPECIES INCLUDE SCHIZACORIUM SCOPARIUM, ELYMUS VIRGINICUS, ELYMUS CANADENSIS, BOUTELOUA CURTIPENDULA, TRIDENS FLAVUS, SPOROBOLUS HETEROLEPIS AND AGROSTIS PERENNANS)
  - INSTALL PER MANUFACTURE'S RECOMMENDATIONS.



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**C206** DATE: 01-14-2022

**EASEMENT REFERENCE**

CITY NO.	COUNTY RECORD		GRANTOR
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PLAN PREPARED BY:

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PROJECT TITLE: PRIVATE STORM SEWER AND STORMWATER FACILITIES FOR DIRECTIONS FOR YOUTH AND FAMILY SERVICES 3840 KIMBERLY PARKWAY NORTH MITIGATION PLAN

DIVISION USE ONLY		OWNER
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DIVISION USE ONLY		SCALE: 1"= 20'	SHEET: 7/11

CITY OF COLUMBUS  
DEPARTMENT OF PUBLIC UTILITIES  
DIVISION OF SEWERAGE AND DRAINAGE  
DIVISION USE ONLY

CONTRACT DRAWING NO. CC-19463  
RECORD PLAN NO.

### SC-740 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH SC-740.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
  - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
  - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
  - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
  - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
  - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD. THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
  - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

### IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-740 SYSTEM

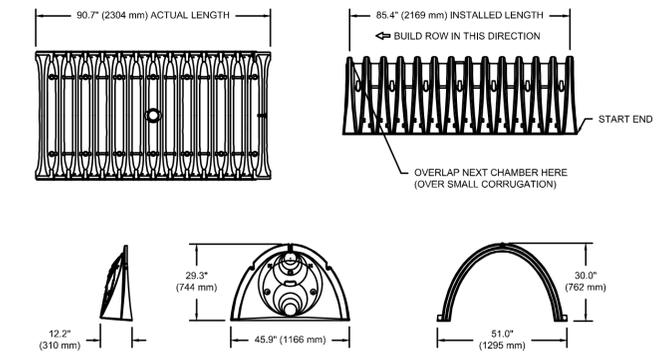
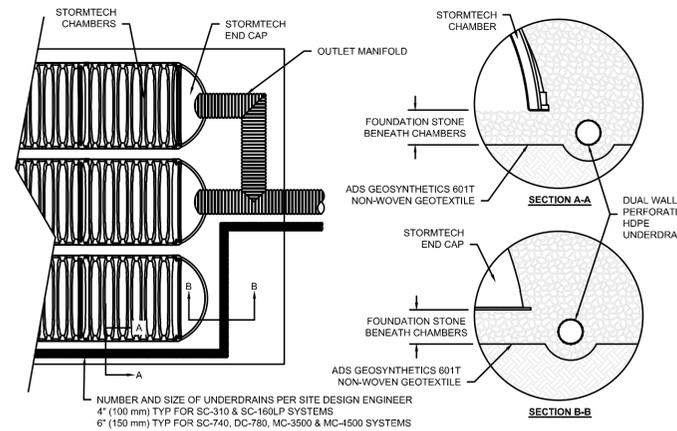
- STORMTECH SC-740 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
  - STONESHOOTER LOCATED OFF THE CHAMBER BED.
  - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
  - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HGE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4" (20-50 mm).
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

### NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- THE USE OF CONSTRUCTION EQUIPMENT OVER SC-740 CHAMBERS IS LIMITED:
  - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
  - NO RUBBER Tired LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
  - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

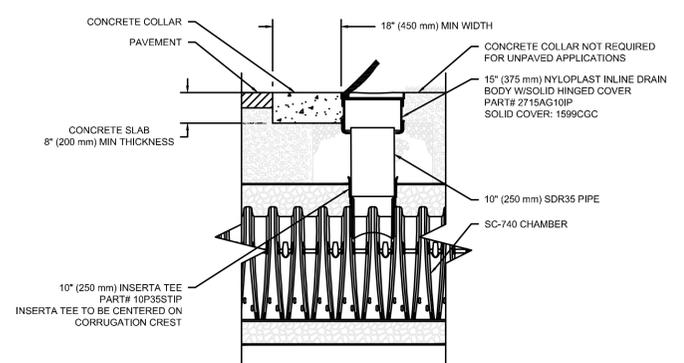
CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



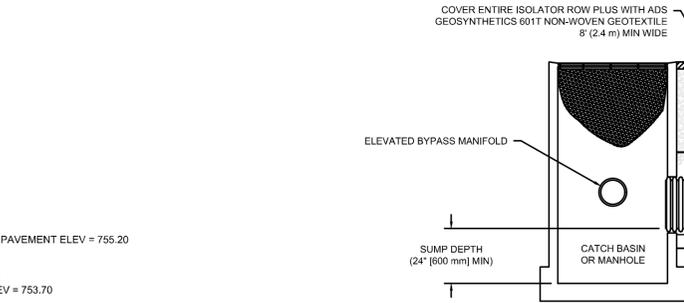
NOMINAL CHAMBER SPECIFICATIONS	
SIZE (W X H X INSTALLED LENGTH)	51.0" X 30.0" X 85.4" (1295 mm X 762 mm X 2169 mm)
CHAMBER STORAGE	45.9 CUBIC FEET (1.30 m³)
MINIMUM INSTALLED STORAGE*	74.9 CUBIC FEET (2.12 m³)
WEIGHT	75.0 lbs (33.8 kg)

\*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS

### UNDERDRAIN DETAIL



### SC-740 10" (250 mm) INSPECTION PORT DETAIL



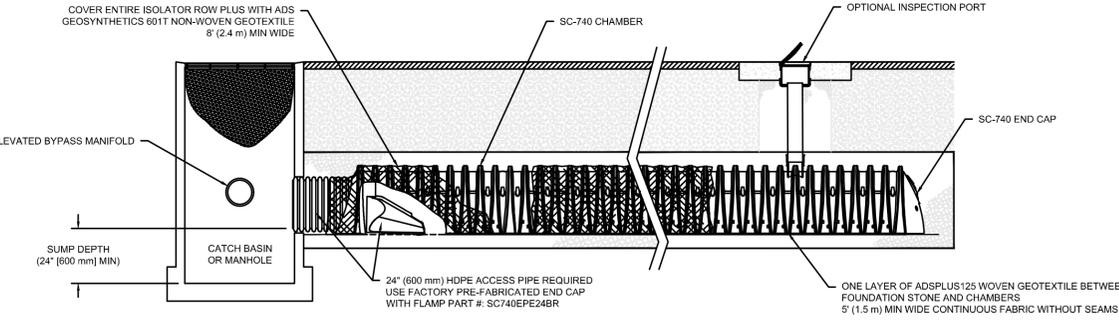
PART #	STUB	A	B	C
SC740EPE007 / SC740EPE061PC	6" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	0.5" (13 mm)
SC740EPE008 / SC740EPE062PC	6" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	0.5" (13 mm)
SC740EPE007 / SC740EPE061PC	8" (200 mm)	12.2" (310 mm)	14.5" (368 mm)	0.6" (15 mm)
SC740EPE008 / SC740EPE062PC	8" (200 mm)	12.2" (310 mm)	14.5" (368 mm)	0.6" (15 mm)
SC740EPE107 / SC740EPE107PC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	0.7" (18 mm)
SC740EPE108 / SC740EPE108PC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	0.7" (18 mm)
SC740EPE127 / SC740EPE127PC	12" (300 mm)	14.7" (373 mm)	12.5" (316 mm)	1.2" (30 mm)
SC740EPE128 / SC740EPE128PC	12" (300 mm)	14.7" (373 mm)	12.5" (316 mm)	1.2" (30 mm)
SC740EPE157 / SC740EPE157PC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	1.3" (33 mm)
SC740EPE158 / SC740EPE158PC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	1.3" (33 mm)
SC740EPE187 / SC740EPE187PC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	1.6" (41 mm)
SC740EPE188 / SC740EPE188PC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	1.6" (41 mm)
SC740EPE24B*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)
SC740EPE24BR*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)

ALL STUBS, EXCEPT FOR THE SC740EPE24B/SC740EPE24BR ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

\* FOR THE SC740EPE24B/SC740EPE24BR THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

### SC-740 TECHNICAL SPECIFICATIONS

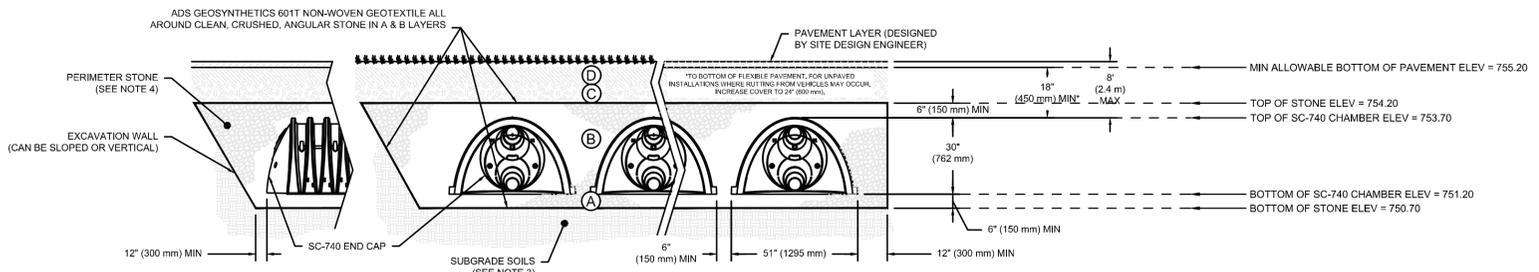


SC-740 ISOLATOR ROW PLUS DETAIL

### ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	<b>FINAL FILL:</b> FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	<b>INITIAL FILL:</b> FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M145 <sup>1</sup> A-1, A-2, A-3 OR AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN), DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	<b>EMBEDMENT STONE:</b> FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	<b>FOUNDATION STONE:</b> FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. <sup>2,3</sup>

- PLEASE NOTE:
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
  - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERS WITH A VIBRATORY COMPACTOR.
  - WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
  - ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



### NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
  - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
  - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
  - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

### UNDERGROUND DETENTION VOLUME SUMMARY

CHAMBER BED	NO. & TYPE OF CHAMBERS	VOID SPACE (%)	CHAMBER VOLUME (CF)	STONE STORAGE VOLUME (CF)	TOTAL STORAGE VOLUME (CF)
6,225 SF	154 (SC-740)	30	7,069	4,421	11,490

NOTES:  
THE CONTRACTOR SHALL PROVIDE THE CITY CERTIFIED REPORTS FROM A CERTIFIED LABORATORY VERIFYING THE AGGREGATE FOR THE WATER DETENTION LAYERS OF THE STORMWATER DETENTION FACILITY MEETS OR EXCEEDS 40% VOID SPACE.

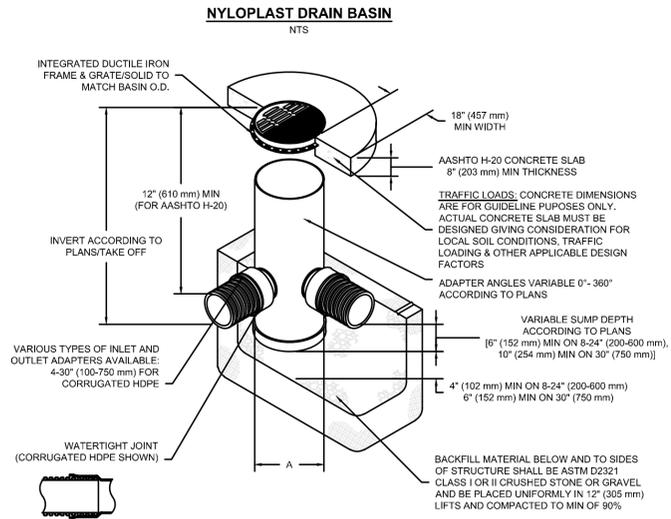
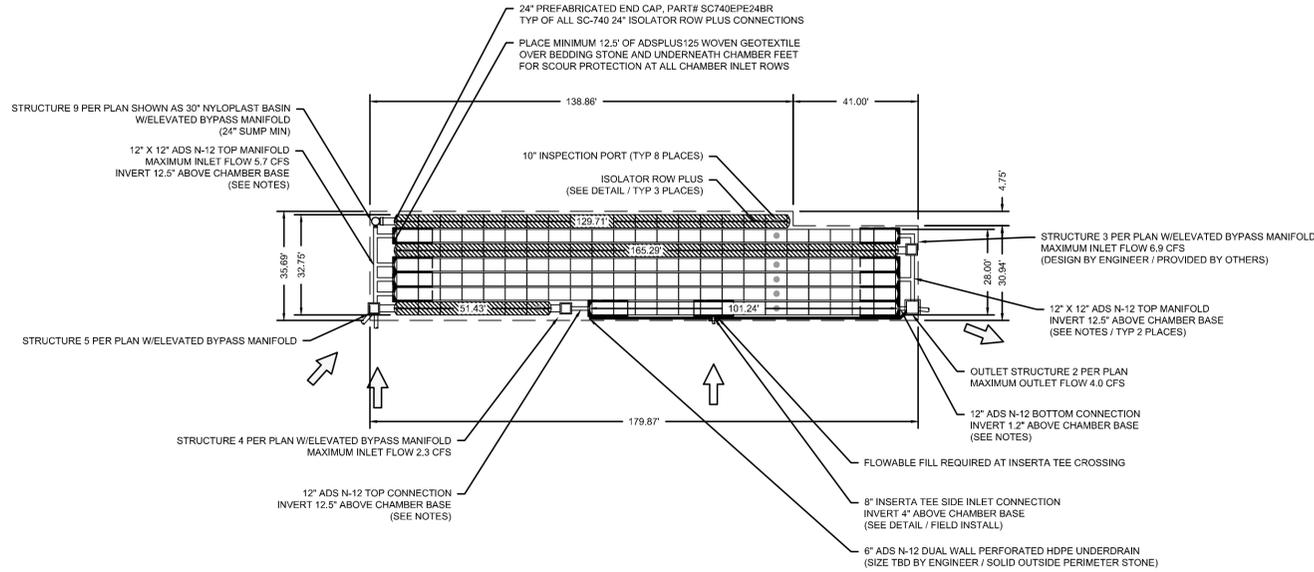
### SC-740 CROSS SECTION DETAIL

EASEMENT REFERENCE			REVISIONS			PLAN PREPARED BY:	PROJECT TITLE:	CITY OF COLUMBUS		
CITY NO.	COUNTY RECORD	GRANTOR	NO.	DESCRIPTION	DATE			DEPARTMENT OF PUBLIC UTILITIES DIVISION OF SEWERAGE AND DRAINAGE		
	VOL.	PAGE				<p>THE KLEINGERS GROUP CIVIL ENGINEERING   www.kleingers.com SURVEYING   350 Worthington Rd., Ste B LANDSCAPE ARCHITECTURE   Westerville, OH 43082 614.882.4311</p>	PRIVATE STORM SEWER AND STORMWATER FACILITIES FOR DIRECTIONS FOR YOUTH AND FAMILY SERVICES 3840 KIMBERLY PARKWAY NORTH STORMTECH SC-740 DETAILS	DIVISION USE ONLY		
								OWNER	CONTRACTOR	
							INSPECTOR	SCALE: N.T.S.		
							AGREEMENT	COMPLETED	SHEET: 8/11	
							RPD	CHK	CID	CON.DR.
							INDEX	RECORD	CONTRACT DRAWING NO. CC-19463	
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Before You Dig  
C207 DATE: 01-14-2022

PROPOSED LAYOUT	
154	STORMTECH SC-740 CHAMBERS
16	STORMTECH SC-740 END CAPS
8	STONE ABOVE (in)
6	STONE BELOW (in)
30	% STONE VOID
11,490	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED)
3,149	INSTALLED SYSTEM WATER QUALITY VOLUME (CF) BELOW ELEVATION 751.68
6,225	SYSTEM AREA (ft <sup>2</sup> )
431	SYSTEM PERIMETER (ft)

PROPOSED ELEVATIONS	
761.70	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)
755.70	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)
755.20	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)
755.20	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)
755.20	MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT)
754.20	TOP OF STONE
753.70	TOP OF SC-740 CHAMBER
752.24	12" TOP MANIFOLD / CONNECTION INVERT
751.53	INSERTA TEE SIDE INLET CONNECTION INVERT
751.30	12" BOTTOM CONNECTION INVERT
751.21	24" BOTTOM MANIFOLD INVERT
751.21	24" ISOLATOR ROW PLUS CONNECTION INVERT
751.20	BOTTOM OF SC-740 CHAMBER
750.70	UNDERDRAIN INVERT
750.70	BOTTOM OF STONE



**NOTES**

- 8-30\" (200-750 mm) GRATES/SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
- 12-30\" (300-750 mm) FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
- DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS
- DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS & HANCOR DUAL WALL) & SDR 35 PVC
- FOR COMPLETE DESIGN AND PRODUCT INFORMATION: [WWW.NYLOPLAST-US.COM](http://WWW.NYLOPLAST-US.COM)
- TO ORDER CALL: 800-821-6710

A	PART #	GRATE/SOLID COVER OPTIONS		
8\" (200 mm)	280AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
10\" (250 mm)	2810AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
12\" (300 mm)	2812AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
15\" (375 mm)	2815AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
18\" (450 mm)	2818AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
24\" (600 mm)	2824AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
30\" (750 mm)	2830AG	PEDESTRIAN AASHTO H-20	STANDARD AASHTO H-20	SOLID AASHTO H-20

**INSPECTION & MAINTENANCE**

- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- INSPECTION PORTS (IF PRESENT)
    - REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
    - REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
    - USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
    - LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
    - IF SEDIMENT IS AT, OR ABOVE, 3\" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
  - ALL ISOLATOR PLUS ROWS
    - REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
    - USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
      - MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
      - FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
    - IF SEDIMENT IS AT, OR ABOVE, 3\" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45\" (1.1 m) OR MORE IS PREFERRED
  - APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
  - VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS, RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

**NOTES**

- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.
- THE PROPERTY OWNER, ITS ADMINISTRATORS, EXECUTORS, SUCCESSORS, HEIRS OR ASSIGNS SHALL MAINTAIN THE STORMWATER CONTROL FACILITY OR FACILITIES IN GOOD WORKING CONDITION ACCEPTABLE TO THE CITY AND IN ACCORDANCE WITH THE SCHEDULE OF LONG-TERM MAINTENANCE ACTIVITIES IN THE STORMWATER CONTROL FACILITY MAINTENANCE PLAN. THE PROPERTY OWNER SHALL MAINTAIN COPIES OF COMPLETE, DATED AND SIGNED INSPECTION CHECKLISTS IN A MAINTENANCE INSPECTION LOG, ALONG WITH RECORDED DATES AND DESCRIPTIONS OF MAINTENANCE ACTIVITIES PERFORMED BY THE PROPERTY OWNER TO REMEDY THE DEFICIENCIES OBSERVED DURING PRIOR INSPECTIONS. THE MAINTENANCE INSPECTION LOG SHALL BE KEPT ON THE PROPERTY AND SHALL BE MADE AVAILABLE TO THE CITY UPON REQUEST. A COPY OF THE MAINTENANCE INSPECTION LOG SHALL BE SUBMITTED ANNUALLY BY DECEMBER 31ST OF EACH YEAR. MAINTENANCE INSPECTION LOGS SHALL BE SUBMITTED TO:

CITY OF COLUMBUS DIVISION OF SEWERAGE AND DRAINAGE,  
STORMWATER AND REGULATORY MANAGEMENT SECTION  
1250 FAIRWOOD AVENUE, COLUMBUS, OHIO 4320

THE CONTRACTOR IS DIRECTED TO VERIFY ALL QUANTITIES PRIOR TO PREPARING AND SUBMITTING HIS BID, ANY ITEMS OF WORK CALLED FOR ON THE PLANS FOR WHICH NO SPECIFIC METHOD OF PAYMENT IS INDICATED SHALL BE PERFORMED BY THE CONTRACTOR AND THE COST OF SUCH WORK BE INCLUDED IN THE UNIT PRICE BID FOR VARIOUS ITEMS.

**ESTIMATE OF QUANTITIES - UNDERGROUND DETENTION SCP**

ITEM	QUANTITY	UNIT	DESCRIPTION
203	1,410	CY	EXCAVATION
207	3	EA	DANDY BAG INLET PROTECTION
604	1	EA	MANHOLE (COC AA-S104)
604	3	EA	CATCH BASIN (COC AA-S133B (3'X3'))
604	1	EA	OUTLET STRUCTURE (MODIFIED COC AA-S133B (4'X4'))
623	1	LS	LAYOUT STAKES
624	1	LS	MOBILIZATION
901	20	LF	12\" STORM PIPE WITH TYPE 1 BEDDING, WITH ITEM 912 COMPACTED BACKFILL
SPEC	1,109	LF	UNDERGROUND DETENTION - STORMTECH SC-740 - 9 ROWS (154 CHAMBERS, TOTAL LENGTH = 1,109 LF, 48 ISOLATOR ROW CHAMBERS, 8 - 10\" INSPECTION PORTS)
SPEC	1	EA	30\" NYLOPLAST DRAIN BASIN
SPEC	1	LS	AS-BUILT SURVEY AND ENGINEERING CERTIFICATION FOR POST-CONSTRUCTION STORMWATER CONTROL PRACTICE



**C208** DATE: 01-14-2022

EASEMENT REFERENCE			REVISIONS			PLAN PREPARED BY:  CIVIL ENGINEERING SURVEYING LANDSCAPE ARCHITECTURE www.kleingers.com 350 Worthington Rd., Ste B Westerville, OH 43082 614.882.4311	PROJECT TITLE: PRIVATE STORM SEWER AND STORMWATER FACILITIES FOR DIRECTIONS FOR YOUTH AND FAMILY SERVICES 3840 KIMBERLY PARKWAY NORTH STORMTECH LAYOUT & PCM				CITY OF COLUMBUS DEPARTMENT OF PUBLIC UTILITIES DIVISION OF SEWERAGE AND DRAINAGE DIVISION USE ONLY		
CITY NO.	COUNTY RECORD VOL. PAGE	GRANTOR	NO.	DESCRIPTION	DATE		DIVISION USE ONLY		OWNER	CONTRACTOR		SCALE: N.T.S.	SHEET: 9/11
								INSPECTOR					
								AGREEMENT	COMPLETED				
								RPD	CHK	CID	CON.DR.	CONTRACT DRAWING NO. CC-19463	RECORD PLAN NO.
								INDEX	DETAIL	RECORD	FILE		

## PROJECT DATA

PLAN DESIGNER: THE KLEINGERS GROUP  
350 WORTHINGTON RD, SUITE B  
WESTERVILLE, OH 43082  
PHONE: (614) 882-4311  
CONTACT: MIKE COUVREUR  
EMAIL: mike.couvreur@kleingers.com

OWNER: DIRECTION FOR YOUTH AND FAMILIES GROUP INC.  
1515 INDIANOLA AVE  
COLUMBUS, OH 43201  
PHONE: (614) 286-5186  
CONTACT: JENNIFER VANSCHOYCK  
EMAIL: JVanSchoyck@dfyf.org

PROJECT DESCRIPTION: THE PROJECT WILL CONSTRUCT A NEW COMMUNITY BUILDING FOR DIRECTIONS FOR YOUTH AND FAMILY SERVICES LOCATED IN COLUMBUS, OHIO. IMPROVEMENTS WILL INCLUDE A NEW BUILDING, PARKING LOT, UNDERGROUND DETENTION, STORM SEWER, SANITARY SEWER, WATER SERVICE AND OTHER RELATED SITE UTILITIES.

EXISTING SITE CONDITIONS: THE CURRENT SITE IS AN EXISTING COMMUNITY CENTER AND IT IS BROKEN UP INTO TWO DRAINAGE AREAS. BOTH DRAINAGE AREAS ULTIMATELY DRAIN TO MASON RUN ON THE WEST SIDE OF THE SITE. THE EAST SIDE OF THE SITE DRAINS FROM NORTH TO SOUTH TO AN EXISTING CATCH BASIN IN THE PARKING LOT AND OUTLETS TO AN EXISTING CATCH BASIN (D2503) ALONG KIMBERLY PARKWAY NORTH. THE CATCH BASIN IS PART OF THE PUBLIC STORM SEWER SYSTEM THAT ULTIMATELY OUTLETS TO MASON RUN. THE WEST SIDE OF THE SITE DRAINS FROM EAST TO WEST AND DRAINS DIRECTLY TO MASON RUN.

ADJACENT AREAS: THE SITE IS BORDERED TO THE EAST AND NORTH BY MULTI-FAMILY DEVELOPMENT (LAR 12), TO THE WEST BY MULTI-FAMILY DEVELOPMENT (AR12) AND TO THE SOUTH BY KIMBERLY PKWY NORTH.

SOILS: B6B - BENNINGTON SILT LOAM, 2 TO 6 PERCENT SLOPES  
C6H11 - CARDINGTON SILT LOAM, 2 TO 6 PERCENT SLOPES  
C6H12 - CARDINGTON SILT LOAM, 6 TO 12 PERCENT SLOPES, ERODED  
Sh - SHOALS SILT LOAM, OCCASIONALLY FLOODED

CRITICAL AREAS: KIMBERLY PKWY NORTH SHALL REMAIN CLEAR OF SEDIMENT AND DEBRIS FROM THE PROJECT IMPROVEMENT CONSTRUCTION TRAFFIC AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE TO CLEAR WHEELS OF DEBRIS AND SEDIMENT TO LIMIT THE EXISTING ROADWAYS FROM ADDITIONAL SEDIMENT.

EROSION & SEDIMENT CONTROL MEASURES: PROPOSED CONSTRUCTION WILL REQUIRE EROSION AND SEDIMENT RUNOFF PROTECTION BY USE OF INLET STRUCTURES PROTECTION AS SEDIMENT CONTROL AND SEDIMENT FENCE. THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THE SEDIMENT BASIN TO A POINT IN WHICH THE SITE SEDIMENT RUNOFF CAN BE CONTROLLED BY OTHER MEASURES IN ACCORDANCE WITH THE NOTES AND DETAILS LISTED ON THIS SHEET.

LATITUDE: N 39° 55' 23.14"  
LONGITUDE: W 82° 53' 39.61"  
ESTIMATED CONSTRUCTIONS DATES: 02/01/2022 - 08/31/2023

TOTAL SITE AREA: 2.523 ACRES  
TOTAL DISTURBED AREA: 1.93 ACRES

EXISTING IMPERVIOUS AREA: 0.83 ACRES  
PROPOSED IMPERVIOUS AREA: 1.25 ACRES  
INCREASE IN IMPERVIOUS AREA: 51.8%

PRE-CONSTRUCTION RUNOFF COEFFICIENT: C=0.58  
POST-CONSTRUCTION RUNOFF COEFFICIENT: C=0.69

ULTIMATE RECEIVING STREAM: MASON RUN TO BIG WALNUT CREEK

## MAINTENANCE

THE CONTRACTOR SHALL MAINTAIN, REPAIR, OR REPLACE ALL EROSION CONTROL INSTALLATIONS AS NEEDED TO ENSURE THE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL REPAIRS TO BMPS SHALL BE MADE WITHIN 3 DAYS (OR SOONER IF POSSIBLE) OF NOTIFICATION OF DEFICIENCIES, IF THE CORRECTIONS ARE NOT MADE WITHIN THE 3 DAY PERIOD, LIQUIDATED DAMAGES MAY BE ASSESSED AS PER THE ODOT CMS SECTION 108.27.

ONGOING INSPECTION OF INSTALLATIONS WILL BE PERFORMED BY THE CONTRACTOR OR DESIGNATED REPRESENTATIVE.

ANY TRAPPED SEDIMENT OR DEBRIS REMOVED DURING CLEANING OF OR REMOVAL OF BMP INSTALLATIONS SHALL BE PLACED IN AREAS NOT SUBJECT TO EROSION AND PERMANENTLY STABILIZED.

## CONSTRUCTION SEQUENCE

TO COMPLETE THE EXCAVATION AND CONSTRUCTION OF THE PROPOSED JOB IMPROVEMENTS, COORDINATION OF THE CONTRACTOR'S WORK CREWS WILL BE REQUIRED. THE GENERAL CONSTRUCTION SEQUENCE IS AS FOLLOWS:

- INSTALL PERIMETER CONTROL AND INLET PROTECTION.
- INLET PROTECTION TO ACT AS SEDIMENT CONTROL FOR THIS PROJECT. THE DRAINAGE AREA GOING TO EACH INLET PROTECTION IS LESS THAN 1.0 ACRES.
- STRIP TOPSOIL AND ANY UNSUITABLE MATERIAL THROUGH THE INCREMENTAL WORK AREA.
- INSTALL TEMPORARY SEDIMENT CONTROLS WITHIN 24 HOURS FOLLOWING THE STRIPPING OPERATION.
- PERFORM MASS GRADING FOR FINAL PAVING.
- INSTALL SITE UTILITIES. INSTALLING INLET PROTECTION ON NEW STORM STRUCTURES AS WORK PROGRESSES.
- ANY DISTURBED OR EXPOSED AREAS SHALL BE STABILIZED PER OEPA TEMPORARY AND PERMANENT STABILIZATION REGULATIONS INCLUDING:
  - SEEDING
  - DITCH MATTING
  - INLET PROTECTION
  - MULCHING
  - WATERING
- INSTALL UNDERGROUND DETENTION SYSTEM, PERFORM FINAL PAVING, FINE GRADE, AND PERMANENT SEEDING.
- PROVIDE PERMANENT STABILIZATION FOR ANY DISTURBED AREAS AND REMOVE PERIMETER CONTROLS AND INLET PROTECTION.

## EMERGENCY ACTION & SPILL PREVENTION PLAN

THE SCOPE OF WORK COVERED BY THIS PLAN INCLUDES EMERGENCY RESPONSE TO SPILLS, CONTAINMENT OF SPILLED LIQUIDS, EMERGENCY NOTIFICATION NUMBERS, AND SOIL EXCAVATION FOR SPILL CLEAN-UP.

IN THE EVENT OF A SPILL EVENT THE EMPLOYEE SHALL ASSESS THE SPILL AND IMMEDIATELY NOTIFY THE SAFETY OFFICER AND SUPERVISOR IN CHARGE, OR OTHER INDIVIDUALS AS LISTED BELOW.

TITLE	NAME	PHONE NUMBER
SITE SUPERINTENDENT		
PROJECT ENGINEER	THE KLEINGERS GROUP	(614) 882-4311

IMMEDIATELY AFTER NOTIFICATION, THE EMPLOYEE WILL BE DIRECTED BY THE SAFETY OFFICER, OR RESPONSIBLE PARTY TO START CONTAINMENT PROCEDURES TO PREVENT THE MATERIAL FROM REACHING THE STORM SEWERS, DRAINAGE DITCH, AND OTHER OUTLETS USING THE FOLLOWING ACTIONS OR ANY OTHER MEANS NECESSARY WITHOUT COMPROMISING WORKER SAFETY:

- CLEAR PERSONNEL FROM THE SPILL AREA AND ROPE OFF AREA.
- STOP THE SPILL.
- USE SORBENT MATERIALS, PLUG PUTTY, OR HOLE PUTTY AS NECESSARY TO CONTROL THE SPILL AT THE SOURCE.
- CONSTRUCT A TEMPORARY CONTAINMENT DIKE OF SORBENT MATERIALS OR DIRT TO CONTAIN SPILL.

SPILL KITS WILL BE LOCATED ON THE PROJECT AS DESIGNATED ON THE SWPPP PLAN.

UPON COMPLETION OF CONTAINMENT OPERATIONS, PROPER CLEAN-UP PROCEDURES WILL BE IMPLEMENTED IN ACCORDANCE WITH REGULATORY PROCEDURES.

ADDITIONAL EMERGENCY CONTACT NUMBERS: 24 HOUR PHONE NO.:

OHIO EPA	614-728-3898

## GENERAL NOTES

THE CONTRACTOR IS HEREBY ADVISED THAT STRICTER POLLUTION CONTROL STANDARDS AND ENFORCEMENT HAVE BEEN IMPOSED BY THE OHIO EPA SINCE MARCH 10, 2003 AND WITH A REVISION IN APRIL 2008. ALSO, MANY PRIVATE CITIZEN ENVIRONMENTAL GROUPS, WHO HAVE BEEN KNOWN TO FILE CIVIL LEGAL ACTIONS, ARE PRESENT IN THE AREA AND OBSERVE ALL CONSTRUCTION OPERATIONS.

THE CONTRACTOR SHALL INFORM ALL SUBCONTRACTORS OF THE REQUIREMENTS AND RESPONSIBILITIES OF THE SWPPP AND SHALL DOCUMENT ALL SUCH NOTIFICATIONS AND/OR DISCUSSIONS.

THE CONTRACTOR WILL BE REQUIRED TO PARTICIPATE IN SEDIMENT AND EROSION CONTROL INSPECTIONS ON A WEEKLY BASIS AND SIGN AN APPROVED INSPECTION SHEET THAT SHALL BE KEPT ON FILE AT THE JOB SITE.

UNLESS OTHERWISE NOTED, STANDARDS AND SPECIFICATIONS ESTABLISHED IN THE LATEST EDITION OF THE OEPA "RAINWATER AND LAND DEVELOPMENT" HANDBOOK SHALL GOVERN THE EROSION AND SEDIMENT CONTROL INSTALLATIONS SPECIFIED ON THIS PLAN.

THIS PROJECT WILL INVOLVE SEVERAL CONSTRUCTION PHASES AND SEQUENCING THROUGHOUT ITS LIFETIME. IT IS VERY IMPORTANT THAT ALL TEMPORARY SEDIMENT AND EROSION CONTROL (S&EC) FIELD METHODS ALONG WITH THIS PLAN, ARE UPDATED TO REFLECT THE ACTUAL FIELD CONDITIONS, CURRENT WEATHER CONDITIONS AND SITE GRADE CHANGES. THE ENGINEER OR THE OHIO EPA CAN AND WILL MODIFY THIS PLAN AS NECESSARY.

THE CONTRACTOR WILL VOLUNTARILY SELF REPORT ANY POTENTIAL VIOLATIONS OF THE OEPA NPDES PERMIT TO THE ENGINEER AND THE OEPA.

THE CONTRACTOR SHALL REMOVE EXISTING GROUND COVER ONLY AS NECESSARY FOR THE PROJECT PHASE CURRENTLY UNDER CONSTRUCTION.

CONSTRUCTION AND DEMOLITION DEBRIS SHALL BE PROPERLY DISPOSED OF ACCORDING TO OHIO EPA REQUIREMENTS.

THE CONTRACTOR WILL BE REQUIRED TO BUILD SEDIMENT BASINS OR SEDIMENT TRAPS OR USE EQUAL METHODS TO DETAIN AND CLEAN WATER TO ACCEPTABLE EPA STANDARDS BEFORE RELEASING THE WATER BACK INTO THE STREAM.

THERE SHALL BE NO TURBID DISCHARGES TO SURFACE WATERS, RESULTING FROM DEWATERING ACTIVITIES. SEDIMENT-LADEN WATER MUST PASS THROUGH A SETTLING POND, FILTER BAG, OR OTHER COMPARABLE PRACTICE, PRIOR TO DISCHARGE.

NO SOLID OR LIQUID WASTE SHALL BE DISCHARGED INTO STORM WATER RUNOFF.

ALL PROCESS WASTEWATER (EQUIPMENT WASHING, LEACHATE FROM ON-SITE WASTE DISPOSAL, ETC.) SHALL BE COLLECTED AND DISPOSED OF AT A PUBLICLY OWNED TREATMENT WORKS.

ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH ALL LOCAL EROSION/SEDIMENT CONTROL, WASTE DISPOSAL, SANITARY AND HEALTH REGULATIONS.

OTHER EROSION CONTROL ITEMS MAY BE NECESSARY DUE TO ENVIRONMENTAL CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND IMPLEMENTATION OF ADDITIONAL EROSION CONTROL ITEMS, AT THE ENGINEER'S DISCRETION.

NO SOIL, ROCK, DEBRIS OR OTHER MATERIAL SHALL BE DUMPED OR PLACED IN ANY AREAS NOT ADEQUATELY PROTECTED BY EROSION CONTROL INSTALLATIONS.

IT IS PREFERRED TO USE PERMANENT EROSION CONTROL ITEMS AS SHOWN IN THE PLANS TO CONTROL CONSTRUCTION POLLUTION WHEN POSSIBLE. OTHERWISE, THE TEMPORARY POLLUTION PREVENTION ITEMS ARE TO BE USED.

MOST TEMPORARY S&EC METHODS, INCLUDING BUT NOT LIMITED TO, SILT FENCE AND DITCH CHECKS MAY ALL HAVE TO BE PERIODICALLY REMOVED AND REPLACED, OR MOVED FROM THE EXISTING ROAD DITCH OR STRIPPED AREAS AS WORK PROGRESSES. ANY CHANGES SHALL BE NOTED IN THE PLAN BY RED LINE AND DATED ON A CORRECTIVE ACTION LOG.

ALL TEMPORARY SEDIMENT CONTROLS AND STORM WATER QUALITY METHODS WILL BE BUILT/INSTALLED AS THE PROJECT PROGRESSES TO ELIMINATE UNNECESSARY DISTURBANCE AND REDUNDANCY. ALL TEMPORARY CONTROLS SHALL BE IN PLACE AND FUNCTIONING PROPERLY WHEN THREATENING WEATHER IS IMMINENT.

"TEMPORARY STABILIZATION" MEANS THE ESTABLISHMENT OF TEMPORARY VEGETATION, MULCHING, GEOTEXTILES, SOD, PRESERVATION OF EXISTING VEGETATION AND OTHER TECHNIQUES CAPABLE OF QUICKLY ESTABLISHING COVER OVER DISTURBED AREAS TO PROVIDE EROSION CONTROL BETWEEN CONSTRUCTION OPERATIONS.

"PERMANENT STABILIZATION" MEANS THE ESTABLISHMENT OF PERMANENT VEGETATION, DECORATIVE LANDSCAPE MULCHING, MATTING, SOD, RIP RAP AND LANDSCAPING TECHNIQUES TO PROVIDE PERMANENT EROSION CONTROL ON AREAS WHERE CONSTRUCTION OPERATIONS ARE COMPLETE OR WHERE NO FURTHER DISTURBANCE IS EXPECTED FOR AT LEAST A YEAR.

STREET CLEANING (ON AN AS-NEEDED BASIS) IS REQUIRED THROUGH THE DURATION OF THIS CONSTRUCTION PROJECT. THIS INCLUDES SWEEPING, POWER CLEANING AND (IF NECESSARY) MANUAL REMOVAL OF DIRT OR MUD IN THE STREET GUTTERS.

ALL EROSION AND SEDIMENT CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATION AT THE DISCRETION OF THE CITY OF COLUMBUS AND/OR THE OHIO EPA.

## STABILIZATION PRACTICES

PERMANENT SEEDING AND MULCHING STABILIZATION SHALL BE PROVIDED PER OEPA GUIDELINES AS SET FORTH IN PART II.B OF OHIO EPA PERMIT NO.: OHC000005. (SEE TABLE 1)

TABLE 1: PERMANENT STABILIZATION	
AREA REQUIRING PERMANENT STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS
ANY AREAS THAT WILL LIE DORMANT FOR ONE YEAR OR MORE	WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE
ANY AREAS WITHIN 50 FEET OF A SURFACE WATER OF THE STATE AND AT FINAL GRADE	WITHIN TWO DAYS OF REACHING FINAL GRADE
ANY OTHER AREAS AT FINAL GRADE	WITHIN SEVEN DAYS OF REACHING FINAL GRADE WITHIN THAT AREA

TEMPORARY SEEDING AND MULCHING STABILIZATION SHALL BE PROVIDED PER OEPA GUIDELINES AS SET FORTH IN PART II.B OF OHIO EPA PERMIT NO.: OHC000005. (SEE TABLE 2)

TABLE 2: TEMPORARY STABILIZATION	
AREA REQUIRING TEMPORARY STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS
ANY DISTURBED AREAS WITH 50 FEET OF A SURFACE WATER OF THE STATE AND NOT AT FINAL GRADE	WITHIN TWO DAYS OF THE MOST RECENT DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR MORE THAN 14 DAYS
FOR ALL CONSTRUCTION ACTIVITIES, ANY DISTURBED AREAS THAT WILL BE DORMANT FOR MORE THAN 14 DAYS BUT LESS THAN ONE YEAR, AND NOT WITHIN 50 FEET OF A SURFACE WATER OF THE STATE	WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA
	FOR RESIDENTIAL SUBDIVISIONS, DISTURBED AREAS MUST BE STABILIZED AT LEAST SEVEN DAYS PRIOR TO TRANSFER OF PERMIT COVERAGE FOR THE INDIVIDUAL LOTS.
DISTURBED AREAS THAT WILL BE IDLE OVER WINTER	PRIOR TO THE ONSET OF WINTER WEATHER

ALL TEMPORARY EROSION AND SEDIMENT CONTROL INSTALLATIONS SHALL BE REMOVED WHEN 70% VEGETATION HAS BEEN REACHED.

## SEEDING & MULCHING

MULCH AND/OR OTHER APPROPRIATE VEGETATIVE PRACTICES SHALL BE APPLIED TO DISTURBED AREAS WITHIN 7 DAYS OF GRADING IF THE AREA IS TO REMAIN DORMANT (UNDISTURBED) FOR MORE THAN 14 DAYS OR ON AREAS AND PORTIONS OF THE SITE WHICH CAN BE BROUGHT TO FINAL GRADE.

MULCH SHALL CONSIST OF UNROTTED SMALL GRAIN STRAW APPLIED AT THE RATE OF 2 TONS/AC. OR 90 LB./1000 SQ. FT. (TWO TO THREE BALES). THE STRAW MULCH SHALL BE SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THE SOIL SURFACE IS COVERED FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH. DIVIDE AREA INTO APPROXIMATELY 1000-SQ.-FT. SECTIONS AND PLACE TWO 45-LB. BALES OF STRAW IN EACH SECTION.

MULCH SHALL BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR RUNOFF. THE FOLLOWING ARE ACCEPTABLE METHODS FOR ANCHORING MULCH:

- MECHANICAL-USE A DISK, CRIMPER, OR SIMILAR TYPE TOOL SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL. STRAW MECHANICALLY ANCHORED SHALL NOT BE FINELY CHOPPED BUT BE LEFT GENERALLY LONGER THAN 6 IN.
- MULCH NETTINGS-USE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS, FOLLOWING ALL PLACEMENT AND ANCHORING SUGGESTIONS. USE IN AREAS OF WATER CONCENTRATION AND STEEP SLOPES TO HOLD MULCH IN PLACE.
- SYNTHETIC BINDERS-FOR STRAW MULCH. SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRI-TAC), DCA-70, PETROSET, TERRA TACK OR EQUAL MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER. ALL APPLICATIONS OF SYNTHETIC BINDERS MUST BE CONDUCTED IN SUCH A MANNER WHERE THERE IS NO CONTACT WITH WATERS OF THE STATE.
- WOOD CELLULOSE FIBER - WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. THE FIBER BINDER SHALL BE APPLIED AT A NET DRY WEIGHT OF 750 LB./ACRE. THE WOOD CELLULOSE FIBER SHALL BE MIXED WITH WATER AND THE MIXTURE SHALL CONTAIN A MAXIMUM OF 50 LB./100 GAL. OF WOOD CELLULOSE FIBER.

TEMPORARY SEEDING & MULCHING FOR EROSION CONTROL		
SEED TYPE	PER 1,000 SQ.FT.	PER ACRE
PERENNIAL RYEGRASS	1 POUND	40 POUNDS
TALL FESCUE	1 POUND	40 POUNDS
ANNUAL RYEGRASS	1 POUND	40 POUNDS
SMALL GRAIN STRAW	90 POUNDS	2 TONS
FERTILIZER	6 POUNDS OF 10-10-10 OR 12-12-12	250 POUNDS OF 10-10-10 OR 12-12-12

NOTE: OTHER APPROVED SPECIES MAY BE SUBSTITUTED

## STOCKPILE

SILT FENCING SHALL BE INSTALLED AROUND TEMPORARY SPOIL STOCKPILES. THESE STOCKPILES SHALL BE STRAW MULCHED AND/OR TEMPORARILY SEEDDED WITHIN 7 WORKING DAYS IF LEFT DORMANT FOR 14 DAYS OR LONGER.

## TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, CONSTRUCTION ENTRANCE(S) AND SILT FENCE WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. SEDIMENT CONTROL DEVICES SHALL BE IMPLEMENTED FOR ALL AREAS REMAINING DISTURBED LONGER THAN 14 DAYS AND/OR WITHIN 7 DAYS OF ANY GRUBBING ACTIVITIES. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN 14 DAYS WILL BE STABILIZED WITH A TEMPORARY SEED AND MULCH WITHIN 2 DAYS OF THE LAST DISTURBANCE IF THE AREA IS WITHIN 50 FEET OF A STREAM, AND WITHIN 7 DAYS OF THE LAST DISTURBANCE IF THE AREA IS MORE THAN 50 FEET AWAY FROM A STREAM. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED WITH PERMANENT SEED AND MULCH. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE BASIN.

STABILIZATION TYPE	J	F	M	A	M	J	J	A	S	O	N	D
PERMANENT SEEDING	•	•	•	•	•	•	•	•	•	•	•	•
DORMANT SEEDING	•	•	•	•	•	•	•	•	•	•	•	•
TEMPORARY SEEDING	•	•	•	•	•	•	•	•	•	•	•	•
SODDING	•	•	•	•	•	•	•	•	•	•	•	•
MULCHING	•	•	•	•	•	•	•	•	•	•	•	•

\* IRRIGATION NEEDED  
\*\* IRRIGATION NEEDED FOR 2-3 WEEKS AFTER SOD IS APPLIED

## INSPECTIONS

ALL BMPS ON THIS SITE SHALL BE INSPECTED BY "QUALIFIED INSPECTION PERSONNEL" ASSIGNED BY THE CONTRACTOR OR DESIGNATED REPRESENTATIVE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND BY THE END OF THE NEXT CALENDAR DAY, EXCLUDING WEEKENDS AND HOLIDAYS UNLESS WORK IS SCHEDULED. AFTER A RAIN EVENT OF 0.5 INCHES PER 24 HOUR PERIOD, A RECORD OF THESE INSPECTIONS SHALL BE MAINTAINED IN THE CONSTRUCTION OFFICE WITH THE SWPPP FOR PUBLIC VIEWING. ANY VIOLATIONS WILL BE REPORTED THROUGH THE PROJECT PERSONNEL. A RAIN GAUGE WILL BE LOCATED WITHIN THE PROJECT LIMITS.

FOLLOWING EACH INSPECTION, A CHECKLIST MUST BE COMPLETED AND SIGNED BY THE QUALIFIED INSPECTION PERSONNEL REPRESENTATIVE. AT A MINIMUM, THE INSPECTION REPORT SHALL INCLUDE:

- THE INSPECTION DATE;
- NAMES, TITLES, AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION;
- WEATHER INFORMATION FOR THE PERIOD SINCE THE LAST INSPECTION (OR SINCE COMMENCEMENT OF CONSTRUCTION ACTIVITY IF THE FIRST INSPECTION) INCLUDING A BEST ESTIMATE OF THE BEGINNING OF EACH STORM EVENT, DURATION OF EACH STORM EVENT, APPROXIMATE AMOUNT OF RAINFALL FOR EACH STORM EVENT (IN INCHES), AND WHETHER ANY DISCHARGES OCCURRED;
- WEATHER INFORMATION AND A DESCRIPTION OF ANY DISCHARGES OCCURRING AT THE TIME OF THE INSPECTION;
- LOCATION(S) OF DISCHARGES OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE;
- LOCATION(S) OF BMPS THAT NEED TO BE MAINTAINED;
- LOCATION(S) OF BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION;
- LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED THAT DID NOT EXIST AT THE TIME OF INSPECTION; AND
- CORRECTIVE ACTION REQUIRED INCLUDING ANY CHANGES TO THE SWP3 NECESSARY AND IMPLEMENTATION DATES.

## MAINTENANCE

THE CONTRACTOR SHALL MAINTAIN, REPAIR, OR REPLACE ALL EROSION CONTROL INSTALLATIONS AS NEEDED TO ENSURE THE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL REPAIRS TO BMPS SHALL BE MADE WITHIN 3 DAYS (OR SOONER IF POSSIBLE) OF NOTIFICATION OF DEFICIENCIES, IF THE CORRECTIONS ARE NOT MADE WITHIN THE 3 DAY PERIOD, LIQUIDATED DAMAGES MAY BE ASSESSED AS PER THE ODOT CMS SECTION 108.27.

ONGOING INSPECTION OF INSTALLATIONS WILL BE PERFORMED BY THE CONTRACTOR OR DESIGNATED REPRESENTATIVE.

ANY TRAPPED SEDIMENT OR DEBRIS REMOVED DURING CLEANING OF OR REMOVAL OF BMP INSTALLATIONS SHALL BE PLACED IN AREAS NOT SUBJECT TO EROSION AND PERMANENTLY STABILIZED.

## DUST CONTROL

DUST CONTROL INVOLVES PREVENTING OR REDUCING DUST FROM EXPOSED SOILS OR OTHER SOURCES DURING LAND DISTURBING, DEMOLITION AND CONSTRUCTION ACTIVITIES TO REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES WHICH MAY PRESENT HEALTH HAZARDS, TRAFFIC SAFETY PROBLEMS OR HARM ANIMAL OR PLANT LIFE.

THE FOLLOWING SPECIFICATIONS FOR DUST CONTROL SHALL BE FOLLOWED ONSITE:

- VEGETATIVE COVER AND MULCH - APPLY TEMPORARY OR PERMANENT SEEDING AND MULCH TO AREAS THAT WILL REMAIN IDLE FOR OVER 14 DAYS. SAVING EXISTING TREES AND LARGE SHRUBS WILL ALSO REDUCE SOIL AND AIR MOVEMENT ACROSS DISTURBED AREAS. SEE TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING PRACTICES; AND TREE AND NATURAL AREA PROTECTION PRACTICES.
- WATERING - SPRAY SITE WITH WATER UNTIL THE SURFACE IS WET BEFORE AND DURING GRADING AND REPEAT AS NEEDED, ESPECIALLY ON HAUL ROADS AND OTHER HEAVY TRAFFIC ROUTES. WATERING SHALL BE DONE AT A RATE THAT PREVENTS DUST BUT DOES NOT CAUSE SOIL EROSION. WETTING AGENTS SHALL BE UTILIZED ACCORDING TO MANUFACTURERS INSTRUCTIONS.
- SPRAY-ON ADHESIVES - APPLY ADHESIVE ACCORDING TO THE FOLLOWING TABLE OR MANUFACTURERS' INSTRUCTIONS.

ADHESIVE	WATER DILUTION (ADHESIVE:WATER)	NOZZLE TYPE	APPLICATION RATE (GAL/AC)
LATEX EMULSION	12.5:1	FINE	235
RESIN IN WATER ACRYLIC EMULSION (NO TRAFFIC)	4:1	FINE	300
ACRYLIC EMULSION (NO TRAFFIC)	7:1	COARSE	450
ACRYLIC EMULSION (TRAFFIC)	3.5:1	COARSE	350

## SPILL PREVENTION

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

### GOOD HOUSEKEEPING:

- AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.
- ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
- PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
- SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
- WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
- MANUFACTURERS' RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
- THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ONSITE.

### HAZARDOUS PRODUCTS:

- PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
- ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION.
- IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURERS' OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

## SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

- ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY. MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
- MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SANDWICHES, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
- THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
- SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE. SPILLS OF 25 OR MORE GALLONS OF PETROLEUM WASTE MUST BE REPORTED TO OHIO EPA (1-800-282-9378), THE LOCAL FIRE DEPARTMENT, AND THE LOCAL EMERGENCY PLANNING COMMITTEE WITHIN 30 MINUTES OF THE SPILL. ALL SPILLS, WHICH RESULT IN CONTACT WITH WATERS OF THE STATE, MUST BE REPORTED TO THE OHIO EPA'S HOTLINE.
- SOILS CONTAMINATED BY PETROLEUM OR OTHER CHEMICAL SPILLS MUST BE TREATED/DISPOSED AT AN OHIO EPA APPROVED SOLID WASTE MANAGEMENT FACILITY OR HAZARDOUS WASTE TREATMENT, STORAGE OR DISPOSAL FACILITY (TSDF).
- THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.
- THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE WILL DESIGNATE SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IN THE OFFICE TRAILER ONSITE.

## PRODUCT SPECIFIC PRACTICES

### PETROLEUM PRODUCTS

ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FUEL STORAGE TANKS SHALL BE LOCATED AWAY FROM SURFACE WATERS AND STORM SEWER SYSTEM INLETS. FUEL TANKS SHALL BE STORED IN A DIKED AREA CAPABLE OF HOLDING 150% OF THE TANK CAPACITY.

### FERTILIZERS

FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

### PAINTS

ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

### CONCRETE WASH WATER/WASH OUTS

CONCRETE WASH WATER SHALL NOT BE ALLOWED TO FLOW TO STREAMS, DITCHES, STORM DRAINS, OR ANY OTHER WATER CONVEYANCE. A SUMP OR PIT WITH NO POTENTIAL FOR DISCHARGE SHALL BE CONSTRUCTED IF NEEDED TO CONTAIN CONCRETE WASH WATER. FIELD TILE OR OTHER SUBSURFACE DRAINAGE STRUCTURES WITHIN 10 FT. OF THE SUMP SHALL BE CUT AND PLUGGED. FOR SMALL PROJECTS, TRUCK CHUTES MAY BE RINSED ON THE LOT AWAY FROM ANY WATER CONVEYANCES.

## NOTES:

THIS PLAN MUST BE POSTED ON-SITE. A COPY OF THE SWPPP PLAN AND THE APPROVED EPA STORMWATER PERMIT (WITH THE SITE-SPECIFIC NOI NUMBER) SHALL BE KEPT ON-SITE AT ALL TIMES.

GENERAL PERMIT: OHC000005

DATE OF ISSUE: \_\_\_\_\_

NPDES PERMIT: AWAITING APPROVAL



C209 DATE: 01-14-2022

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